



POTENTIAL PCB SOURCES TO PRSA

VOLUME IV OF IV

Prepared for:
CHEMICAL LAND HOLDINGS, INC.

Prepared By:
EI GROUP, INC.

December 18, 2001

POTENTIAL PCB SOURCES TO PRSA
INDEX OF EXHIBITS ARRANGED FROM SOUTH TO NORTH

NO.	NAME	VOLUME
POINT NO POINT REACH		
1	Scientific Chemical Processing, Inc.	II
2	Celanese Chem. Co. Inc.	II
3	Elan Chemical Co., Incorporated	II
4	Union Carbide	II
5	Avenue P Landfill -Newark Redevelopment & Housing Authority-A. Giordano & Sons-American Cyanamid-Revere Smelting & Refining/ Revere Urban Renewal	II
6	Castrol Oils	II
7	D & J Trucking	II
8	Newark Police Shooting Range	II
9	DuPont/Pitt-Consul/Conoco/Reilly	II
10	Ashland Chemical	II
11	Foundry Street Complex/Avon Drum/CWC/Arkansas Chem., Automatic Electroplating, etc.	II
12	Lucent/Western Electric (AT&T)	II
13	Texaco Refining & Marketing	II
77	Chemical Leaman Tank Lines	IV
14	Bayonne Barrel & Drum Company	III
78	Landfill 15E	IV
15	Syncon Resins	III
16	PSE&G Essex Gen. Station	III
17	Spectraserv, Inc.	III
18	PSE&G Kearny Generating Station	III
19	BASF Corp. Chemical Div.	III
20	Monsanto	III
84	Whittaker Clark & Daniels	IV
23	Otilio Landfill	III
HARRISON REACH		
22	Route 508 Expansion	III
24	Conrail	III
25	Norpak Corporation	III
26	Fairmount Chemical	III
79	ECRR	IV
80	Commercial Solvents	IV
27	G&S Motor Equipment Co. Inc.	IV
28	New Jersey Department of Transportation	III
29	Alliance Chemical Company	III
30	Sun Chemical Corp	III
31	Benjamin Moore & Co.	III
32	Thomasset Colors Div. Hilton Davis	III
33	Technical Coatings	III
34	Chris Craft/Montrose	III
35	GSF Energy, Inc.	III

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NO.	NAME	VOLUME
36	SCA Chemical Service	III
37	Ronson Metals Corp	III
38	Reichold Chemicals	III
81	MSLA 1D	IV
39	Diamond Head Oil Refining Corp.	IV
40	Sherwin Williams Co.	IV
41	Reusche & Co. of T. W. S. Inc.	IV
42	Nimco Shredding Company	IV
43	Stanley Tools	IV
44	Federal Pacific Electric Co.	IV
45	Prentiss Drug & Chemical	IV
46	Albert Steel Drum	IV
47	Tidewater Balling	IV
48	Dresser Industries	IV
49	Betosia Corp.	IV
50	Federated Metals	IV
51	Signo Trading/1140 Thomas St. Site	IV
52	Crucible Steel	IV
53	Guyon Piping	IV
54	Kester Solder	IV
55	Chem Fleur, Inc.	IV
NEWARK REACH		
57	A C Transformers	IV
56	PSE&G Harrison Gas Plant	IV
58	Driver Harris Co.	IV
59	Otis Elevator Company	IV
60	Haz Subs Mgmt. Research Center	IV
61	Celanese Plastics Div.	IV
62	Westinghouse	IV
63	Wagner Electric Corporation (Cooper Industries)	IV
83	Tenneco Oil Company	IV
64	Staley Chemical (A. E. Staley)	IV
KEARNY REACH		
65	Keegan Landfill	IV
66	Hartz Mountain/Hyatt Roller Bearing	IV
67	Franklin-Burlington Plastics	IV
68	Talon Adhesives	IV
82	MacArthur Petroleum & Solvent Company/W.A.S. Terminals Corporation	IV
69	Bergen Metal	IV
ARLINGTON REACH		
70	Frey Industries/PPG	IV
71	PPG/Frey Industries	IV
72	Wilbur B. Driver Co.	IV
PRPs WITH LIMITED ADDRESS INFORMATION		
73	Angelica Healthcare Group	IV

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NO.	NAME	VOLUME
74	City Electric	IV
75	Diaprint Foils	IV
76	Weldotron	IV

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57	A C Transformers	IV
46	Albert Steel Drum	IV
29	Alliance Chemical Company	III
73	Angelica Healthcare Group	IV
10	Ashland Chemical	II
5	Avenue P Landfill -Newark Redevelopment & Housing Authority-A. Giordano & Sons-American Cyanamid-Revere Smelting & Refining/ Revere Urban Renewal	II
19	BASF Corp. Chemical Div.	IV
14	Bayonne Barrel & Drum Company	IV
31	Benjamin Moore & Co.	III
69	Bergen Metal	IV
49	Betosia Corp.	IV
6	Castrol Oils	II
2	Celanese Chem. Co. Inc.	II
61	Celanese Plastics Div.	IV
55	Chem Fleur, Inc.	IV
77	Chemical Leaman Tank Lines	IV
34	Chris Craft/Montrose	III
74	City Electric	IV
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70	Frey Industries/PPG	IV
27	G&S Motor Equipment Co. Inc.	III
35	GSF Energy, Inc.	III
53	Guyon Piping	IV
66	Hartz Mountain/Hyatt Roller Bearing	IV
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4	Union Carbide	IV
63	Wagner Electric Corporation (Cooper Industries)	IV
76	Weldotron	IV
62	Westinghouse	IV
84	Whittaker Clark & Daniels	IV
72	Wilbur B. Driver Co.	IV

Diamond Head Oil Refining Corporation

932520008

STATE OF NEW JERSEY
STATE DEPARTMENT OF HEALTH
BUREAU OF PUBLIC HEALTH ENGINEERING

INSPECTION REPORT

PLACE: Diamond Head Oil Refining Company, Inc. INSPECTED: August 25, 1960
NATURE: Waste Disposal Investigation. WRITTEN: August 27, 1960
BY: Harry H. Hughes TYPED: August 30, 1960

Location:

1401 Harrison Turnpike, Kearny, New Jersey.

Interviewed:

Mr. Martin Morrison, President and Registered Agent.

Drainage Area:

Swamps draining into the Passaic River below Newark.

The Industry:

Used crankcase oil is brought in from a number of service stations and other establishments and is reclaimed using heat, fuller's earth and sodium silicate. The product is repackaged and sold as low-grade motor oil or for other purposes. No acid refining is practiced. Water consumption is 9,000 to 10,000 G.P.D., used mostly for condensers and boilers. There are 25 employees.

The Company owns a plot 1,200' deep with a 200' frontage on Harrison Turnpike and started operations at this site in 1956. This office has no file on the firm, which is not related to Diamond Alkali Chemicals Company of Kearny.

Waste Disposal:

Sanitary sewage was said to be handled by two septic tanks on the property.

All other waste waters, oils and oily sludges are conveyed to specially constructed lagoons behind the buildings. These are impounded by earthen dikes and separated surface oils are skimmed for reclaiming. The sludge contains adsorbent silicate, grease, dirt and other solid residues which can not be reclaimed.

The steel tanks in which the reclaimed product is stored are surrounded by 40' diameter concrete retainers for leakage and fire protection.

Swamp Pollution:

The narrow berms about the waste lagoons are easily eroded and the impoundments were observed to be practically full. Heavy rains or accidental leakage have carried large amounts of oil into the swamps where an extensive swale area has been blackened with sludge deposits. The area is non-tidal and no flow was observed at the time.

Mr. Morrison and his assistants claimed to be making all possible efforts to prevent the

Swamp Pollution (Cont.)

been successful and a pollution problem exists. Their neighbors complained of the black areas and said that a swamp fire occurred a few months ago, causing some damage. The danger of fire is ever present in a condition such as this.

The Hudson County Mosquito Commission pumps water from the swamps into the Passaic River. The water is tea-brown in color and causes a noticeable discoloration of the river near the point of discharge.

Respectfully submitted,

Harry H. Hughes
Principal Public Health Engineer

6E3:05

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 Federal Plaza
New York, New York 10007

----- X	
In the Matter of	:
Diamond Head Oil Refining Company	:
Permit Number NJ 0028054	:
Proceedings under Section 309(a)(3)	:
and (a)(4), Federal Water Pollution	:
Control Act Amendments of 1972	:
(33 U.S.C. §1319)	:
----- X	:

EPA Number NPDES II-76-102

FINDINGS OF VIOLATION
AND
ORDER TO SHOW CAUSE

The following FINDINGS are made and ORDER issued pursuant to the authority vested in the Administrator of the Environmental Protection Agency by the above-referenced statute (hereinafter "the Act") and by him duly delegated to the Regional Administrator of Region II which authority has been duly re-delegated to the (undersigned) Director, Enforcement Division, Region II.

FINDINGS:

1. The Diamond Head Oil Refining Company (Diamond Head) is located at 1401 Harrison Turnpike in Kearney, New Jersey 07032.
2. Diamond Head processes waste oil to produce marketable oil and grease products.
3. For many years, Diamond Head has been discharging a water and oil mixture into a large 7 million gallon lagoon which is located behind its property. This lagoon overflows into a navigable waterway during wet weather periods.
4. Section 301(a) 33 U.S.C. §1311 of the Federal Water Pollution Control Act Amendments of 1972 (the FWPCA) prohibits the discharge of pollutants by any person without a permit issued pursuant to Section 402 (33 U.S.C. §1342).
5. After several requests, Diamond Head submitted, on December 12, 1974, a Short Form C application for a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of pollutants from its facility to Franks Creek.
6. After Diamond Head submitted a short form application, it was determined that additional information would be required by the Environmental Protection Agency, Region II (EPA) in order to develop permit limitations for the subject discharge.

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7. On October 29, 1975, the EPA requested in writing that Diamond Head submit certain additional information on their discharge.

8. To date, Diamond Head has failed to submit such data as requested by EPA although such information has been requested many times.

9. Under Section 402(K) of the FWPCA, discharging pollutants without a permit after an application for a draft permit is made is a violation of the FWPCA if administrative disposition of the application has not been made due to the failure of the applicant to furnish information reasonably required in order to process the application.

It is therefore found that:

1. Diamond Head has not furnished information required to process the application for a NPDES permit in violation of the FWPCA.

2. Diamond Head is discharging pollutants without a permit in violation of the FWPCA.

ORDERED:

Upon a thorough investigation of all relevant facts, including the seriousness of the violations involved, it is hereby ordered, pursuant to Section 309 of the Act, that the permittee shall at 10:30 A.M. on December 28, 1976, appear at the United States Environmental Protection Agency, Region II Office, Room 811 26 Federal Plaza, New York, New York 10007 to show cause before Meyer Scolnick, Director, Enforcement Division, or his designee, why EPA should not refer the permittee to the United States Department of Justice for imposition of civil and criminal penalties as provided by 551319(b), (c) and (d). The permittee shall submit all written material relevant to the aforementioned issues and on which it intends to rely in making its showing to the aforementioned Mr. Meyer Scolnick, at least five (5) days before the scheduled appearance.

Should the permittee have any questions concerning compliance with this order, it should contact Richard Weinstein, Attorney, Water Enforcement Branch at the above address or at (212) 264-4859.

Date: November 24, 1976

Signed: Meyer Scolnick

Meyer Scolnick, Director
Enforcement Division
Region II

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and break out in a cold sweat and have to sit down," she said.

(Please turn to Page 6)

5/7/82 STAR-LEDGER

Firm that created spill awarded cleanup pact

By HERB JAFFE

NEW YORK — The State of New Jersey paid \$5 million to clear away a toxic waste site in the path of Route 280 in Kearny which was created largely by the same people who were awarded the cleanup subcontract, according to testimony at a hazardous waste hearing yesterday.

Among those who testified about the scheme, under oath before the New York State Select Committee on Crime, was William Carracino, who said his company could have had the contract if he agreed to kick back two cents a gallon for the estimated 13 million gallons of waste that was ultimately removed from the site.

Another who testified was Kenneth Mansfield, who was the plant manager for the Edgewater-headquartered operation that was awarded the contract. Mansfield said much of the cleanup waste, which included oil and toxic metallic liquids, was merely transferred to other illegal dump sites and sewers.

Carracino, who was then president of Chemical Control Corp. in Elizabeth and who was released from prison last December after serving more than nine months on a toxic dumping conviction, also testified that a Wayne garbage hauling contractor, Anthony Rizzo — who is under indictment in New Jersey — explained the bid procedure to him:

"Rizzo told me the bid would go to Crescent Construction Co.

"He told me he was with Crescent and that they already had the job one week before the bids were announced."

Ultimately, Crescent Construction

of West Caldwell, in a joint venture with Ell-Dorer Contracting Co. of Warren, did receive the state Department of Transportation contract to complete a two-mile section of Route 280.

The subcontract for the cleanup of the waste oil, sludge and other hazardous materials was awarded to Newtown Oil Refining Corp., with facilities in Long Is-

(Please turn to Page 12)

Firm that created oil spill awarded

(Continued from Page One)

land City and Syracuse. However, Newtown was only one company in an interlocking network of companies controlled by Russell Mahler out of an office in Edgewater. The various companies, which include the defunct Quanta Oil and Hudson Oil companies, operated primarily in New Jersey, New York, Pennsylvania and Massachusetts, and reached as far north as Canada.

According to Carracino, Mansfield and Thomas Humiston, who was a Newtown vice president in charge of the Kearny cleanup, most of the waste was supposed to be taken to Newtown plants in New York and Massachusetts.

"Some of it went to Long Island City; some of it went into landfills, and some of it went down sewers," Mansfield testified.

Mansfield recently pleaded guilty to dumping charges in Pennsylvania through the same operation and will be sentenced May 17. He is also under indictment in New Jersey and New York and has agreed to cooperate with authorities in both states.

While the Select Committee on Crime was primarily concerned with dumping in five New York City landfills, leaving a cleanup cost of many hundreds of millions of dollars, it also heard testimony of other contracts awarded to Newtown for cleaning up its own toxic waste lagoons.

John Cassiliano, former supervisor of landfills for the New York City Department of Sanitation, took the Fifth Amendment on almost every question. Cassiliano was fired in March, after 28 years with that department, on charges he took payoffs to allow toxic dumping in the landfills. He is under a state indictment and is a central figure in a federal investigation in New York.

Considerable testimony was heard with regard to the New Jersey cleanup contract since most of the waste accumulated at the Kearny site for almost 40 years was illegally dumped in New York, according to the witnesses.

Mansfield testified that he believes much of the oil at the site, which was on Harrison Avenue where Route 280 connects with the New Jersey Turnpike, contained cancer-causing PCBs.

He said that the huge lake was spread over some eight acres and belonged to the defunct Diamond Head Oil Co., a waste oil refinery. "Diamond Head was owned by Russell Mahler and Agmet," Mansfield said, referring to still another corporation in the operation.

Upon questioning from New York State Sen. Ralph J. Marino, chairman of the Select Committee on Crime, Mansfield explained that Newtown, which got the contract, also was owned by Mahler.

"So, New Jersey paid them to clean up oil and hazardous waste on their own property, is that right?" asked committee general counsel Jeremiah B. McKenna.

"That's correct," Mansfield said.

He said that such arrangements have been common in New Jersey and New York, although he added that it is becoming more difficult because of the increased attention being focused on the toxic dumping problem.

"There are two kinds of companies in the toxic waste business," Mansfield testified. "There's the cleanup contractors and the disposal facilities. The cleanup contractors were more involved in doing the illegal dumping, often hired to clean up the same stuff they dumped," he explained.

The companies owned by Mahler, for which Mansfield served as a truck driver, plant manager and dispatcher for seven years, were largely involved in both kinds of practices.

Mahler was sentenced to one year in prison and fined \$760,000 in Pennsylv-

vania last month for pleading guilty to dumping millions of gallons of toxic waste in a mine shaft that led into the Susquehanna River.

Humiston said he was in charge of loading the trucks that took the waste away from the Kearny site but said he did not know it was being illegally disposed. He is the president of an oil service company in Syracuse.

"It took us four months to clean up the site. We took away anywhere from 10 to 50 truckloads a day," Humiston said, adding that to his knowledge New Jersey officials were supposed to have tested the toxicity of the materials. Asked where he thought the waste went, Humiston said:

"I thought a lot of it ended up being sold."

His reference was to the fact that large quantities of waste oil are being blended with toxic waste and sold as heating fuel, especially to large apartment complexes.

Carracino testified that he bid for the contract as a subcontractor to S.J. Groves Construction of Woodbridge. "S.J. Groves told us the lake consisted of oil, heavy metals with hazardous waste that included copper, zinc and others," Carracino said.

"We bid \$1.8 million to do the job," Carracino said, explaining this was on the basis of an estimated 8 million gallons. However, Humiston said there were approximately 13 million gallons removed, and Carracino said later on that basis his bid provisions would have increased the price to \$2.2 million.

The Newtown Co. was eventually paid \$5 million for the cleanup.

Prior to the bids being announced, Anthony Rizzo told me Crescent Construction had the contract and that if I wanted the subcontract, I would have to do business with him, and that meant kicking back two cents for every gallon," Carracino explained.

Rizzo is the owner of Anthony Rizzo Carting, originally from Westchester County and now operating in Passaic and Bergen counties. Both Rizzo and his company are among the 58 defendants awaiting trial on charges of participating in a wide conspiracy to control the garbage industry and eliminate competition in nine North Jersey counties.

The trial, which has been postponed several times since the indictments in October 1980, is now scheduled for next September.

"I was told we lost the contract by a paltry amount," Carracino testified. "That was after I got two telephone calls and one visit in person to my office in Elizabeth, from Rizzo," he said.

"He told me that some people wanted to give me the job and I'd have to meet with them at the Crow's Nest, a restaurant in Hackensack," Carracino testified, adding:

"I didn't go. I told Rizzo my bid was only through S.J. Groves. I called Roger Ludlow of Groves and told him about Rizzo and the kickback, and he said he couldn't believe it."

Carracino said he also called Robert Winter, another general in the state Division of Criminal Justice, to tell him.

"Winter told me to meet him at the Rusty Nail Restaurant in New Brunswick the next day. About four hours later I got a phone call from someone who told me not to meet with Winter the next day," Carracino testified.

Asked if he took that as a warning, he said he did. "I don't know who the caller was but I don't think it came from Winter's office," he added.

When asked who the two cents a gallon kickback was to go to, Carracino said he was told it was just to go to "some people."

He also testified that Diamond

Head had a pipe that stretched across Harrison Avenue, opposite the MSL sanitary landfill. "In the cleanup the just pumped a lot of the waste across the street into another site. Afterward, there was a toxic lake on the other side of the street, after Newtown got paid."

Mansfield was asked about the pipe after his testimony and stated:

"I don't know of a pipe across the road but Diamond Head had all kinds of pipes and hoses leading into the surrounding waterways."

The cleanup site is surrounded by wetlands and marshes. At the time of t

MEMO

TO Diamond Head Oil file through Steve Carfora *SC*
FROM D. Dawson *DD* DATE 6/2/82
SUBJECT Telephone conversation with Eastern Chemical Cleaning.

On 6/2/82 at 2:30 PM, I spoke with Laurie from Eastern Chemical Cleaning Co. I asked her to send me a copy of the manifest used to ship the remaining 70 drums from Newtown Refining, Kearny on 5/25/82; she said she would do so (it is PA A3284702). I also asked her to send me a copy of the analysis run on the material, and again, she agreed to do so.

I asked her when the first shipment of 77 drums went to Chemical Waste Management (CWM); she said that all 147 drums are still in the Resource Technology Services (RTS) warehouse in Conshahocken, PA, due to varying results in analysis performed by Eastern and RTS. If RTS results are indeed correct, the material will not be accepted by CWM (the PCB level may be over 500 ppm).

cc: Sue Savoca

932520015

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

(105)

TO Diamond Head Oil file through Steve Carfora *SC*

FROM D. Dawson *DD* DATE 6/9/82

SUBJECT Phone conversation with Walt Witt, Eastern Chemical Cleaning on 6/9/82

At 11:45 a.m., Walt Witt returned my call. He told me the 147 drums left the Resource Technology Services (RTS) warehouse in Conshohocken, PA on Monday, 6/7/82 in 2 box trailers. They are presently being stored on the Chemical Waste Management (CWM) property since their analysis shows higher levels of PCB's (3300 ppm) than the analysis done by Eastern (206 ppm); CWM will not landfill it if the PCB level is higher than 500 ppm. Mr. Witt said the material will probably be incinerated on the Vulcanus, but the decision to do so lies with Newtown Refining, the generator. He suggested I call Mr. Gutfeld at Newtown for the final destination of the material; Mr. Witt said I should also get copies of the analyses and the manifest #'s and dates from Mr. Gutfeld since he is the generator.

I asked Mr. Witt what the 16 empty drums I observed on 6/3/82 were for and he said that Eastern removed those drums to another job. He said Eastern was hired to take the oil out of the tanks, which was accomplished.

Mr. Witt said my questions as far as the clean up of the oil in the base of tank 2, the oil stained soil and debris, the piles of oily sludge, and the lagoon should be taken up with Mr. Gutfeld. I recommend sampling the soil in the tank 2 area for PCB contamination, too.

Mr. Witt told me the tanks were removed by Mazza, but he did not know their location.

I also asked Mr. Witt if Heyrich's vector had been cleaned out with diesel fuel and he said yes.

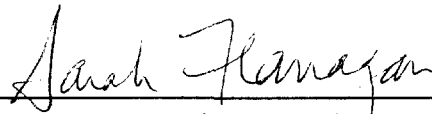
cc: Sue Savoca

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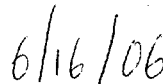
***Diamond Alkali Co.
Passaic River Site***

NJD980528996

THIS DOCUMENT “***Correspondence to Barbara Greer, from Susan Savoca, November 1, 1982***” IS
CURRENTLY CLASSIFIED
NON- CONFIDENTIAL BY EPA.



Sarah Flanagan
Office of Regional Council



Date

MEMOTO Barbara GreerFROM Susan SavocaDATE November 1, 1982SUBJECT Diamond Head Oil Refining~~CONFIDENTIAL~~

Due to my involvement with the Quanta Resources Corporation case, I have had occasion to review information concerning the above-referenced matter. The following is a summary, by source, of this information and recommendations regarding the site.

SUMMARYFrom Diamond Head Files

From in-house files, it is known that Ag-Met Oil Service, Inc. (a New York corporation) filed an Application for Certificate of Authority with the New Jersey Department of State on October 8, 1976. This document indicates that the company was incorporated in New York on September 27, 1976 and that its corporate office was located at 37-80 Review Avenue, Long Island City, New York. (Note that this is the same address as Quanta's Long Island City site which, due to the abandonment by Quanta's trustee, is now undergoing a cleanup operation by NYC.) Its stated business in New Jersey was for the collecting, refining and recycling of liquid oily waste into fuel oil and lube oil. On November 18, 1976, the name was changed to Newtown Refining Corporation and the address for the corporate headquarters was changed to Landmark Tower, One Landmark Square, Suite 303, Stanford, Connecticut. The New Jersey corporate No. was 0100-0270-66.

On June 7 or 8, 1978, the Department received a "Special Waste Facility Application for Temporary One Year Registration" to operate a waste oil reprocess system. The "applicant" was listed as Newtown Refining Corporation and the "company" was listed as Diamond Head Oil Refining Division. The application indicated that the New Jersey corporate number was the same as for Newtown Refining Corporation. The facility's name was listed as Diamond Head Oil Refining. The "Person to Have Prime Administrative Authority" was listed as Russell Mahler. Lloyd Mahler signed the application as Vice President. On July 15, 1978, Diamond Head Oil Refining Division, 1401 Harrison Turnpike, Kearny, New Jersey (Block 285, Lot 3, Hudson County) was issued a TOA (Facility No. 6907B) as a waste oil reprocessor. The expiration date of the TOA was April 30, 1979 and it was conditional on the submission of an engineering design by November 1978.

From the early inspection reports (11/28/78, 2/6/79, 4/12/79), it appears that the site ceased operating in early 1979, possibly due to litigation involving New Jersey Department of Transportation (see discussion infra). There were two underground storage tanks containing an oily substance. These early inspection reports noted oil spills throughout the property. On April 12, 1979, the inspector was informed that "material is being sent to Edgewater."

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(Note that, during this time, Edgewater Terminals were in operation in Edgewater.)

On March 19, 1980, a site inspection revealed that the location appeared to be used for illegal dumping of waste oils, although there was no indication that the site was operating as a facility. The inspector was told that Modern Transportation had been contracted (by EPA?) to clean up the site, but that clean up had not yet commenced. (Note that Modern's waste oil TOA expired on April 30, 1979.)

On April 4, 1980, an inspector was told that the standing oil was periodically vacuumed up by Modern Transportation.

On May 19, 1982, the Bureau of Hazardous Waste received a telephone complaint from John Sarnas of the Kearny Health Department. Mr. Sarnas observed trucks pumping liquid from storage tanks into drums. This resulted in inspections on May 20, 1982, May 21, 1982, May 24, 1982, June 3, 1982, June 15, 1982, and August 13, 1982. The inspectors learned that Newtown Refining Corporation is now a wholly-owned subsidiary of Refinement International Company, 162 Main Street, Woonsocket, Rhode Island. Steven Gutfeld of Refinement stated that Refinement had purchased the site from a company who had bought it from Russell Mahler. Refinement hired Eastern Chemical Cleaning Co., 100 Plaza Center, Secaucus, New Jersey to clean up the site. As part of the clean up, the two underground tanks were analyzed: one of them contained oil and water with less than 50 ppm PCB's and the other had 206 PCB's, according to Eastern. (Although requested, neither Eastern nor Refinement have submitted the analyses to DEP.) About 7,500 gallons of material was pumped out and placed in 147 drums. The drums were to be hauled by Resource Technology Services, 6 Berkeley Road, Devon, PA to the Chemical Waste Management's Landfill in Emelle, Alabama by truck in two shipments. From there, it was allegedly planned to be incinerated on CWM's ship, the Vulcanus. Not all manifests reflecting these transfers have been received. In addition, the inspection reports indicate that there is oil-contaminated soil on this site that needs to be cleaned up. Although the inspector was informed of Refinement's intent to clean it up, it does not appear to have been done. EP Toxicity analysis of a soil sample indicated 32 ppm lead, which exceeds the 5 ppm limit.

From Kearny

On October 29, 1982, I telephoned the Kearny Tax Assessors Office (201-991-2700) to request ownership information on Block 285, Lot 3 (site of Diamond Head).

According to their records, Diamond Head Oil Refining Company, Inc. sold the site to PSC Resources, Inc., a Delaware Corporation, successor to Phillips Resources, Inc. on November 1, 1973. On November 3, 1976, the site was purchased by Ag-Met Oil Service, Newtown Refining Corporation. There was no record of an owner prior to Diamond Head, nor of an owner subsequent to Ag-Met-Newtown.

From New Jersey Department of Transportation v. PSC Resources, Inc., et al.

In September 1977, NJDOT sued PSC Resources, Inc., Diamond Head Oil Refining Company, Inc., and Newtown Refining Corporation due to the discharge of petroleum products and other material onto NJDOT's property and into the waters of the State.

The facts of this case indicate that Diamond Head Oil Refining Company, Inc. operated the facility from February 1, 1946 to November 1, 1973. During this time period, Diamond Head discharged oily waste water onto adjacent property which NJDOT acquired on March 6, 1968. PSC Resources, Inc. was incorporated as a subsidiary of Phillips Screw Company, Inc. in Delaware on October 23, 1973 and received a certificate of authority to transact business in New Jersey on October 31, 1973. PSC was incorporated for the purpose of acquiring the stock and/or assets of Diamond Head, which purpose was effectuated on October 26, 1973. From November 1, 1973 to November 3, 1976, PSC continued to operate the plant at 1401 Harrison Turnpike under the name of "Diamond Head Oil Refining Company, Division of PSC Resources, Inc." NJDOT alleged that PSC continued Diamond Head's practice of pumping waste onto DOT's property. On November 3, 1976, the facility was purchased by Ag-Met Oil Service, Inc. In 1977, NJDOT began construction of Interstate 280 and had to remove and dispose of more than 10 million gallons of oil-contaminated water and more than 200,000 cubic yards of oily sludge at a cost of nearly five million dollars. NJDOT filed suit on September 14, 1977.

The issue before the Superior Court, Hudson County in NJ Transportation Department v. PSC Resources, Inc., 175 NJ Super.447 (Law Div.1980) was whether a corporation which acquires all the assets of a predecessor corporation for cash and continues essentially the same operation as the predecessor corporation, the successor is liable for damages resulting from the environmental tort (discharge of a hazardous substance) of its predecessor. The Court found that PSC was the successor to Diamond Head and was subject to liability for any claims against it arising from the discharge of pollutants onto NJDOT's property.

RECOMMENDATIONS

1. I suggest that this memo be submitted to an appropriate agency to investigate allegations that, not only did companies run by Russell Mahler cause the "oil lake" at this site but that companies owned by Mahler were contracted by the State to clean up the site. There was testimony to this effect given to the New York State Senate Select Committee on Crime. I have requested a copy of the transcript of Ken Mansfield's and William Carracino's testimony.
2. As this case needs no legal input at this time, I recommend that the case be referred to the Division of Waste Management for close monitoring and that the following steps be taken:

932520019

- a. Obtain all manifests used to transport the storage tank oil to Alabama.
- b. Ensure that the oil-contaminated soil is cleaned up and properly disposed of, as well as the oil lagoon and tank 2 (see inspection report June 3, 1982).
- c. Monitor the site for illegal disposal of solid and hazardous waste.

Susan Savoca
Susan Savoca
Office of Regulatory Services

mw

c: Quanta File
Modern File
Jon Berg
Steven Carfora ✓

MEMOTO Sue Savoca and Barbara GreerFROM Donna Dawson and Steve Carfora

DATE _____

SUBJECT Clarification of statements in 11/1/82 memo from Sue Savoca to
Barbara Greer regarding Diamond Head Oil Refining

Page 2 of paragraph 3 of the 11/1/82 memo from Sue Savoca to Barbara Greer states that the drums were hauled to CWM's landfill in Emelle, Ala. by truck in two shipments. From there, it was allegedly planned to be incinerated on CWM's ship, the Vulcanus. Originally, the drums were sent to the landfill in Emelle for burial, however, they were re-analyzed upon arrival and this analyses showed higher levels of PCBs (over 3100 ppm) than the analyses done while the material was in Kearny which showed 206 ppm PCBs. The landfill cannot bury material with higher than 500 ppm PCBs, so arrangements were then made by Newtown to have the material incinerated on the Vulcanus.

The following is a synopsis of my involvement with Diamond Head Oil Refining.

- 5/20/82 Site inspection showed clean up in progress by Eastern Chemical Cleaning Co. I spoke with Walt Witt, operations manager.
- 5/21/82 Phone call from John Scoll of Eastern who gave me the contact person at Newtown (generator), Mr. Gutfeld and their EPA ID #.
- 5/24/82 Site inspection to monitor transportation of first shipment using manifest #ALA37955 and NJ0086257.
- 5/25/82 Second shipment of drums left Kearny and were also stored with hauler, Resource Technology Services, in Conshohocken, PA. Manifests used PAA3284702 and NJ0024019.
- 6/3/82 Site inspection, security guard present, 3 samples taken.
- 6/11/82 Requested copies of analyses from Walt Witt on the phone, he said I should get them from the generator. I called Mr. Gutfeld and left the message since he was not in.
- 6/14/82 Phone call from Mr. Gutfeld who said he would send me the two laboratory analyses done on the oil. He said he will clean up the rest of tank 2, but the sludge and lagoon are on DOT property and not his responsibility. Mr. Gutfeld said a fence was installed to keep dumpers out.
- 6/15/82 Site inspection, no guard was present, fence not completed. I spoke with Mr. Gutfeld on the phone, he said he would send me copies of the analyses. He also said the remains of tank 2 will be removed but the sub-surface ground contains oil which he does not feel is his responsibility.

8/13/82 Phone conversation with Steve Gutfeld. He said he does not know what manifest #'s were used to ship the oil to Ala. from PA, he said he would give me the #'s when he finds out what they are. He also said again he would send me copies of the analyses.

In October 1982 (exact date unknown), I called Alabama and asked them to send me copies of manifests used by Newtown; they agreed. This was after trying to get the copies from the generator and from NJDEP, manifest section.

Recommendations

1. Call Newtown daily until they send us the analyses and manifest copies (never received).
2. Try to get a commitment date when they will complete the Diamond Head Oil clean up.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Acting Director

2 Babcock Place

West Orange, N.J. 07052

201 - 669 - 3960

mailed 3/16/88

March 15, 1988

Jeryl Maglio
Hudson Meadows Urban
Development Corp.
525 Riverside Ave.
Lyndhurst, N.J.

Dear Ms. Maglio:

Pursuant to our telephone conversation of 18 February 1988, I would like to outline potential problems which may exist in regard to development of the former Diamond Head Oil Refinery site on Harrison Ave. (Rt. 508), Kearny. Recently the Departments' Bureau of Planning and Assessment referred this case to our office based on their inspection and preliminary assessment which showed excessive levels of a number of soil contaminants, as we discussed over the phone. NJDEP believes that remediation needs to be done at the Diamond Head site, and has been attempting to locate a former owner and operator, Russell Mahler, as Responsible Party. Unfortunately we have had no success thus far in finding Mr. Mahler.

Based on our files it appears that improper disposal practices and sloppy waste management at Diamond Head resulted in chronic discharges of volatile organics, toxic metals and petroleum hydrocarbons. Planning and Assessment's site survey indicates significant soil contamination, and groundwater may be impacted as well. Of additional concern is the possibility of PCB's in soil, as Mr. Mahler was alleged to have dealt in PCB-tainted oil. The Department will, if possible, issue Mr. Mahler an order requiring site cleanup, and will seek Responsible Party search help from appropriate agencies.

932520023

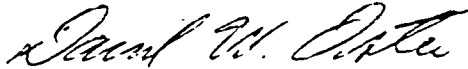
Jeryl Maglio

Page 2

If Mr. Mahler cannot be located NJDEP will take alternate measures to ensure that proper remediation is done before development of the site proceeds. I suggest that it would be in the interest of Hudson Meadows to undertake a clean-up investigation for the Diamond Head site, (if this has not already been done) and to consider implementing the necessary remediation procedures. This office would be happy to review and comment on any such plans. As the site history, environmental assessments and actions of this office are all matters of public record, site remediation by Hudson Meadows might preclude the possibility of future legal problems with regulatory agencies, buyers or tenants.

If you have any questions, or require further information, please contact me at 669-3981.

Sincerely,



David W. Oster
Environmental Specialist

DWO/gr

932520024

Sherwin Williams Company

932520026

01191-A DIRECT #2
01/12/72ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

PAGE 324

- IN THOUSANDS OF DOLLARS AND CENTS -

NO.	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES QTR FOR CTR YEAR	SALES CURR. YR.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST ID / PART CTR CO.
	ARUCLOR DIST 5460-HI SOL																0035A	1040-100-17
5729	PUREX CORP WILMINGTON CA		.200															10055445
5729	PUREX CORP PHILA PA	1.00		1.00														10065486
	PARENT COST. TOT-PUREX CORP LANE	1.00	.200	1.00														00065780
5119	LANCOPHIL PRODS CARLSTADT NJ		.500															10066301
5124	RAYBESTOS WAMMA STRATFORD CT		3.20		21.0		3.00	6.00		3.00	3.00				3.00	3.00		10066409
5729	LANCOPHIL TUBES BELLO PR CA			.050					.050									10066404
5729	100 SPOT PAINT EVANSVILLE IN	3.00	1.00	3.00	1.00							.400		.600	.400		.400	10066727
5729	100 SPOT PAINT EVANSVILLE IN			5.50										5.50				00210547
5729	100 SPOT PAINT EVANSVILLE IN	5.00	6.25	5.00	6.00		1.50		1.50	1.50	1.50							00210573
5729	100 SPOT PAINT EVANSVILLE IN		1.50		1.50											1.50		10067309
5729	100 SPOT PAINT EVANSVILLE IN		.100															00157961
	PARENT COST. TOT-RELIANCE UNIV L		1.60		1.50											1.50		10067296
5729	100 SPOT PAINT EVANSVILLE IN		.050		.300		.100				.150			.030				00135753
5729	100 SPOT PAINT EVANSVILLE IN	40.0	40.0	40.0	60.0			24.0							8.0	12.0	24.0	00154243
5729	100 SPOT PAINT EVANSVILLE IN		.520															10027740
5729	100 SPOT PAINT EVANSVILLE IN		26.0															00224456
5729	100 SPOT PAINT EVANSVILLE IN		.400															10058207
5729	100 SPOT PAINT EVANSVILLE IN				6.00				4.00								2.00	00185265
5729	100 SPOT PAINT EVANSVILLE IN	.600	1.20	.600	.600	.300	.300											00251712
5729	100 SPOT PAINT EVANSVILLE IN		.500															10033810
5729	100 SPOT PAINT EVANSVILLE IN	7.00	5.00	7.00	1.55			.550		.400			.300		.300			10033817
5729	100 SPOT PAINT EVANSVILLE IN																	10033883
	PARENT COST. TOT-S C M CORP CORT	7.60	6.70	7.60	2.15	.300	.300	.550		.400			.300		.300			00045454
5729	100 SPOT PAINT EVANSVILLE IN	3.00	2.45	3.00	.800					.100				.350		.350		10016887
5729	100 SPOT PAINT EVANSVILLE IN				5.00								5.00					10021671
5729	100 SPOT PAINT EVANSVILLE IN				.050		.050											10021928
	PARENT COST. TOT-SEARS ROEBUCK C				5.05		.05						5.00					00045216
5729	100 SPOT PAINT EVANSVILLE IN		.050							.300	.100		.200	.100				00197750
5729	100 SPOT PAINT EVANSVILLE IN				.700													00137059
5729	100 SPOT PAINT EVANSVILLE IN				2.00	2.00												10072654
5729	100 SPOT PAINT EVANSVILLE IN				.200			.100					.100					10072697
5729	100 SPOT PAINT EVANSVILLE IN	1.00		1.00														10072727
5729	100 SPOT PAINT EVANSVILLE IN	15.0	18.0	15.0	29.0	2.0	2.0	4.0	3.0	8.0				10.0				10072754
5729	100 SPOT PAINT EVANSVILLE IN		.300															00137847
	PARENT COST. TOT-SHERWIN WILLIAMS	16.0	18.3	16.0	31.9	4.0	2.0	4.1	3.0	8.3	.1		.3	10.1				10072794
5729	100 SPOT PAINT EVANSVILLE IN				.225		.225											10073545

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ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

- IN THOUSANDS OF POUNDS AND DOLLARS -																			
A G	MS REV	NAME OF PRODUCT/CUSTOMER	POTENTIAL	1971 YEAR SALES	1972 YEAR SALES	1973 YEAR SALES	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST ID / MFG CODE
		ARUCLOR DIST 5460-LON COLOR															003	058	1040-491-1
5724		H B FULLER COMPANY EDISON NJ				.150			.150										10027996
		PARENT CUST. TOT-H B FULLER ST P				1.65		.50	1.15										10030072
5726		GREAT WESTERN CHE RICHMOND CA																	10035473
5726		MANHATTAN ADPES BROOKLYN NY		.500		4.10	2.50			1.60									10040419
5726		MINN MIN - MFG FREEHOLD NJ				2.20			2.20										10053059
5726		STANDARD CHEM TEXAS HD				.050			.050										10036037
5726		SHERWIN WILLIAMS NEWARK NJ		1.25															10012127
5726		SOLAR COMPOUNDS LINDEN NJ		40.0															10013755
5726		SUN CHEM CARLSTADT NJ		.100															10015625
5726		TECHNICAL COATINGS LUBBOCK TX				.500	.500												00240614
5726		TITANINE INC UNION NJ		.100		.300	.300									.100	.100		10080231
5726		UNION AMSCO CARTERET NJ				17.3	5.00		7.50	4.00									10004175
5726		UNION AMSCO LINDEN NJ				.400	.400												00247123
5726		UNION AMSCO SAYREVILLE NJ		1.00															10004209
		PARENT CUST. TOT-UNION OIL CO LO		1.00		17.7	6.20		7.50	4.00									00047155
		TOTAL PRODUCT * * * * * LB		46.0		36.2	9.5	2.6	17.5	6.6						.1	.1		1040-491-
		ARUCLOR 6090															017	88A	1045-090-
5726		ALLEG SOLV CARNEGIE CORAOP PA		.450		1.80			.45		1.35								10002095
5726		ALLEG SOLV CARNEGIE MANOR PA				.450			.450										00107719
		TOT P-T ALLEG SOLV CARN * POUNDS		.450		2.25			.45	.45	1.35								00107790
5726		CENTRAL SOLV HAYWARD-HAYWARD		.900															10015045
		TOT P-T CENTRAL SOLV HA * POUNDS		.900															10015049
5726		CENT SOL SANTA FE SPR-CA				3.60		.50	.85				.45		1.80				10015111
		TOT P-T CENTRAL SOLV SA * POUNDS				3.60		.50	.85				.45		1.80				10015111
		PARENT CUST. TOT-CENTRAL SOL CHI		1.35		5.05		.50	1.30	.45	1.35		.45		1.80				10015131
5726		FOUNDRY EQUIPMENT PROD ROSE PA				1.80							1.80						00252500

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JUN 21 1990



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
CN 028
Tranton, N.J. 08625-0028
(609) 633-1408
Fax # (609) 633-1454

M E M O R A N D U M

TO: Debbie Pinto, Acting Chief
Bureau of Planning and Assessment

FROM: Bruce Venner, ³⁶Chief
Bureau of Compliance and Technical Services

SUBJECT: Responsible Party Investigation
Avenue P Landfill, Newark

DATE: June 20, 1990

The Bureau of Compliance and Technical Services' Special Investigation Section has prepared the attached Responsible Party Investigation Summary for the subject case to assist the Bureau of Planning and Assessment in its site evaluation.

Please be advised that referenced key documents are maintained in this bureau's files. Should you have any questions in this matter, do not hesitate to contact Doug Stuart at (609) 633-0700.

BV:lmc

c D. Stuart, Section Chief, Special Investigation Section
Y. Yacoub, Chief, Metro Bureau of Enforcement
P. Smith, Investigator, SIS/BCTS
RPIU File

AKF000156



DISCHARGE/ABANDONMENT INFORMATION:

Avenue P Landfill
357-405 Avenue P
City of Newark, Essex County
Block 5020; Lots 14 and 138

Current Owner:
Newark Redevelopment and Housing Authority
57 Sussex Street
Newark, NJ 07103

SUBSTANCES DISCHARGED/ABANDONED:

The following substances have been detected in soil, sediment, surface water and ground water samples obtained from the Avenue P Landfill by the Cavanaugh Group:

Base Neutrals: Anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, flourene, naphthalene, phenanthrene, pyrene.

Metals: Antimony, arsenic, beryllium, cadmium, chromium, cyanide, lead, mercury, nickel, selenium, silver, sulfide, zinc.

PCBs: Aroclor 1260

Pesticides: b-BHC, heptaclor

Petroleum Hydrocarbons

Volatile Organics: Acetone, chlorobenzene, 1,1 dichloroethane, 1,1 dichloroethylene, ethylbenzene, methyl isobutyl ketone, naptha, toluene, 1,1,2,2 tetrachloroethane, tetrachloroethylene, trichloroethylene, 1,1,1 trichloroethane, 1,1,2 trichloroethane trimethylsilane, xylene.

The Newark Redevelopment and Housing Authority retained the Cavanaugh Group, 19 Route 46, Fairfield, New Jersey to remediate contamination on site. Cavanaugh began mobilization of the site on April 29, 1985.

An emergency drum removal was conducted by Cavanaugh. The drums were staged in containment berms made from fill material taken on site. In June of 1985, twenty seven bore holes were sunk near the staging area. Soil samples were obtained from each boring and noted to contain multicolored (ie. white, red, blue, green, pink, yellow, orange, etc.) materials. Fifteen ground water samples were also collected from the borings. Metals and volatile organics were detected in the ground water and soil samples.

By July, 1985 the Cavanaugh Group had removed approximately 1,460 drums from the creek's banks and bottom. Most of the 55 gallon drums were ruptured. The contents of some drums analyzed contained low flash points (85 Degrees Fahrenheit); cyanides, corrosives and PCBs.

RESPONSIBLE PARTY:

The Sherwin-Williams Company, Inc.
Brown and Lister Avenue (Branch Location)
Newark, NJ 07105
(201) 344-7000

Corporate Headquarters:
101 Prospect Avenue, N.W.
Cleveland, Ohio 44115-1075
(216) 566-2000

Corporate Status:
Active; Manufacture Paints Varnishes and Chemical Cleaners

Financial Status:
Net Sales 1988 \$1,950,474,000 Standard and Poors

Principals:
J.G. Breen
Chairman and Chief Executive Officer
101 Prospect Avenue, N.W.
Cleveland, Ohio 44115-1075

AKF000172

932520031

Alliance manufactured specialty organic intermediates such as dyes, pigments, and diazo compounds. The chemicals 2-chloro-1,4-diethoxy-5-nitro benzene (DEB) 1975-1980, and 5-chloro-2,4-dimethoxyaniline (ITR-amine) 1965-1983, were manufactured at the plant. Both chemicals are listed by the EPA as Class II dioxin compounds which are precursors to dioxin formation.

Alliance makes product by mixing muratic acid, water, and organic chemical reagents in a large vessel. A chemical reaction occurs in which the intermediate is synthesized, then filtered and washed. In the synthesis step, some material is washed free of product and then filtered and washed. Two waste streams are generated from the process: filter cake and acidic process water. The cake is stored in drums and a sludge box at the rear of the facility, adjacent to the landfill (see map in file). Approximately 200 drums were observed in the rear storage area during an inspection conducted by the Division of Waste Management on November 19, 1980. Many of these drums were insecure for hazardous waste storage. In 1980, a sample of Alliance's activated carbon filter cake was analyzed by New York Testing Laboratories Inc. and found to contain cyanide, phenols, ammonia, arsenic, cadmium, chromium, copper, lead, mercury, nickel and selenium.

The process water was once discharged into a trench which led to an unlined neutralization pit. PCBs and volatile organics ie. 1,2 dichloroethane, ethylbenzene, and xylene were detected in sludge samples obtained from the trench. This material was later determined to be hazardous material. Additional samples tested in February and March, 1981 indicated the presence of benzene, trimethybenzenes, naphthalene, methylene chloride, momomethyl naphthalenes, chloroform, carbon tetrachloride and 1,1,1 trichloroethane. Similar contaminants ie. PCBs, cyanide, sulfides, lead, mercury and petroleum hydrocarbons were detected in sediment, surface water and soil samples obtained from the site. A black charcoal like material was present in some of the composite soil samples. Alliance generated an activated carbon filter cake at their plant.

Metals and volatile organics were also detected in soil and ground water samples taken from the Avenue P site. These compounds are similar to those detected in samples collected from Alliance. Drums removed from the site contained cyanide and PCBs.

Aerial photographs (CTK, IRC - 51, 52) taken on August 20, 1972 revealed that an extensive drum storage area existed at the Alliance plant. The drums were located on the south western side of the property. A road was observed entering onto the northwestern portion of the landfill in subsequent aerial photographs (2063-43-5927, 5928, 5929) dated April 11, 1974. This road was not evident in previous aeriels and the number of drums on the premises had been significantly reduced. Most of the drums were discovered in the northwest portion of the site.

Pfister Chemical stated in the Industrial Waste Survey that their Avenue P plant, Alliance Chemical, Inc., used D&J Trucking to haul waste off site.

Sun Chemical Corp. (SUN), 185 Foundry Street, Newark manufactures red, magenta and violet quinacridone pigments. The company generates process waste from filter presses and filter cake washes. This material consists mostly of polyphosphoric acid, but may also contain alcohol and glacial



State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028

Scott A. Weiner
Commissioner

MAR 16 1993

Karl J. Delaney
Director

Prepared By David W. Paddock
David Paddock
Date March 12, 1993

IN THE MATTER OF THE
D & J TRUCKING SITE

AND

NEWARK REDEVELOPMENT AND HOUSING AUTHORITY,
DOMINICK ATTANASI,
JOSEPH ATTANASI,
BENJAMIN MOORE & COMPANY, INC.,
SHERWIN WILLIAMS COMPANY, INC.
Respondents

ADMINISTRATIVE
CONSENT
ORDER

This Administrative Consent Order is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection and Energy (hereinafter "the Department") by N.J.S.A. 13:1D-1 et seq., and the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq. and duly delegated to the Assistant Director, Division of Responsible Party Site Remediation pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. The D & J Trucking Site (hereinafter the "Site") is located at 310-336 Avenue P, Newark, Essex County, New Jersey. The Site consists of approximately 3 acres, is defined as Block 5060, Lot 149 on the tax maps of the City of Newark and is bordered generally by the Newark Police Academy to the north, Avenue P to the west, Linde Gas Company to the south and industrial property to the east. The Site is owned by the Newark Redevelopment and Housing Authority and leased to the AFA Pallet Co., Inc. for the storage of wood chip mulch. There are no buildings or industrial facilities remaining at the Site. A stormwater retention basin and a drainage ditch form the eastern and southern boundary of the Site, respectively.

numerous 55-gallon drums into a large, unlined, pit at the Site. Dominick Attanasi stated that the liquid he was pouring into the pit was paint wastewater collected from Benjamin Moore & Company. On April 11, 1977 Mr. J. Lewczak of Benjamin Moore & Company verified that this material was paint wastewater originating from Benjamin Moore & Company.

12. On April 12, 1977 the Department conducted an inspection at the Site which indicated that the Site was being used for the disposal of construction debris. While performing this inspection the Department was informed by Joseph Attanasi, the Secretary of D & J Trucking, that the Site was used as a transfer station for industrial waste.

13. On December 27, 1977 the Department visited Sherwin-Williams Company and Benjamin Moore & Company to ascertain the type and quantity of waste being disposed of with D & J Trucking. Mr. Lawrence Berg, Plant Manager of Benjamin Moore's facility on Lister Avenue, stated that Benjamin Moore disposed of 150 55-gallon drums of waste pigments and alkyd resins with D & J Trucking every month for the past ten years. Mr. W. Soltys, Plant Controller of Sherwin Williams' facility on Lister Avenue, stated that Sherwin-Williams disposed of 250 drums of waste pigments, alkyd resins, off-spec paint and waste varnish with D & J Trucking every month.

14. On March 17, 1978 D & J Trucking & Waste Co., Inc. allegedly sold the Site to the Newark Redevelopment and Housing Authority. At the time of this alleged sale, and for years afterward, numerous 55 gallon drums and other industrial debris were apparent throughout the Site.

15. On June 26, 1990 the United States Environmental Protection Agency conducted a Site Inspection to assess the general extent of contamination at the Site. This analysis of the samples collected during this inspection indicate the following:

<u>Soil</u>	
<u>Contaminant</u>	<u>Concentration (ppm)</u>
Arsenic	111
Chromium	259
Lead	1,750
Phenanthrene	65
Fluoranthene	99
Pyrene	55
Beta - BHC	2.3
4, 4' - DDE	2.3
Endosulfan II	2.9
PCB (Aroclor 1260)	37

<u>Surface Water</u>	
<u>Contaminant</u>	<u>Concentration (pph)</u>
Barium	350
Chromium	112
Lead	689
Zinc	1,330

Reusche & Company of T.W.S., Inc.

Facility Name: ~~REUSCHE & CO~~
Secondary Name: TRANS WORLD SUPPLIES INC
Address: 2-6 LISTER AVE
NEWARK, NJ 07105
EPA ID: NJD002195519 EPA Region: 02 County Code: 013

List of alias records for this facility follows:

Record Type: RCRIS System ID: NJD986574507
Facility Name: L REUSCHE & CO LIQUIDATING TRUST
Address: 2-6 LISTER AVE
NEWARK, NJ 07105

Record Type: RCRIS System ID: NJD002195519
Facility Name: REUSCHE & CO OF TWS INC
Address: 2 LISTER AVE
NEWARK, NJ 07105

Record Type: NCDB System ID: I02#199109271488 2
Facility Name: REUSCHE & CO.
Address: 2 LISTER AVE.
NEWARK, NJ 07105

Record Type: NCDB System ID: D02#PCB-92-0118
Facility Name: REUSCHE & CO., TWS
Address: 2 LIGHT AVE.
NEWARK, NJ 07105

Record Type: DOCKET System ID: 02-92-0023
Facility Name: REUSCHE & CO OF TWS INC
Address: 2 LISTER AVE
NEWARK, NJ 07105
SICs: 5198 2816

Record Type: CICIS System ID: 0003980
Facility Name: REUSCHE & CO OF TWS INC
Address: 2 LISTER AVE
NEWARK, NJ 07105
SICs: 5198 2816

Record Type: ~~PADS~~ System ID: NJD002195519
Facility Name: REUSCHE & CO OF T.W.S., INC.
Address: 2 LISTER AVENUE
NEWARK, NJ 07105

Record Type: TRIS System ID: 07105LRSCH26LIS
Facility Name: L. REUSCHE & CO.
Address: 2-6 LISTER AVE.
NEWARK, NJ 07105
SICs: 2816
Comments: RECORD MOVED FROM FACILITY ID NJD986574507
TO FACILITY ID NJD002195519 BY CCJ ON 11/14/94.
REASON WAS INCORRECT LINKAGE.

932520037

Facility Name: UNITED AIRLINES INC

Address: HANGAR 14 NEWARK AIRPORT

NEWARK, NJ 07114

EPA ID: NJD986568566 EPA Region: 02 County Code: 013

List of alias records for this facility follows:

Record Type: RCRIS System ID: NJD986568566

Facility Name: UNITED AIRLINES INC

Address: HANGAR 14 NEWARK AIRPORT

NEWARK, NJ 07114

Record Type: PCS System ID: NJ0076252

Facility Name: NEWARK INTERNATIONAL AIRPORT

Address: UNITED AIRLINES HANGAR NO 14

NEWARK, NJ 07114

Record Type: ~~PADS~~ System ID: NJD986568566

Facility Name: ~~UNITED AIRLINES MAINT. HGR. 14~~

Address: HANGER 14

NEWARK, NJ 07714

Facility: ELLA INDUSTRIES INC
Address: NEWARK, NJ 07104
Penalty (\$): 6,000 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-91-0332 Case Name: VAN IDERSTINE
Type: EPCRA ORDER FOR COMPLIANCE AND PENALTY
File Date: 07/08/1991 Conclusion Date: 10/10/1991
Defendant: VAN IDERSTINE
Law(s): EPCRA 313
Violation(s): Reporting violations
Facility: DARLING - DELAWARE CO INC
Address: NEWARK, NJ 07105
Penalty (\$): 6,500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-92-0023 Case Name: ~~REUSCHE & CO~~
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 11/26/1991 Conclusion Date: 03/13/1992
Defendant: REUSCHE & CO
Law(s): TSCA 6
Violation(s): General facility requirements
Pollutant(s): ~~PCBS~~
Facility: REUSCHE & CO OF TWS INC
Address: NEWARK, NJ 07105
Penalty (\$): 500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-92-0029 Case Name: TROY CHEMICAL CORPORATION
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 12/31/1991 Conclusion Date: 02/12/1993
Defendant: TROY CHEMICAL CORPORATION
Law(s): TSCA 8A
Violation(s): Reporting violations
Facility: TROY CHEMICAL CORP INC
Address: NEWARK, NJ 07105
Penalty (\$): 34,000 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-92-0088 Case Name: JPD INC
Type: RCRA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 03/18/1992 Conclusion Date: 12/29/1992
Defendant: JPD INC
Law(s): RCRA 3002 RCRA 3010
Violation(s): Failure to notify
Container
Pollutant(s): F001
Facility: J P D INC
Address: NEWARK, NJ 07107
Penalty (\$): 42,500 Superfund Cost Awarded (\$):

932520039

Nimco Shredding Company

932520041

Administrative Action 02-89-0117 Case Name: DUBLON FINISHES CORP
Type: EPCRA ORDER FOR COMPLIANCE AND PENALTY
File Date: 12/16/1988 Conclusion Date: 09/26/1989
Defendant: DUBLON FINISHES CORP
Law(s): EPCRA 313
Violation(s): Toxic release inventory (Section 313)
Facility: ABLON FINISHES INC
Address: NEWARK, NJ 07105
Penalty (\$): 1,000 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-89-0218 Case Name: NIMCO SHREDDING CO
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 06/30/1989 Conclusion Date: 02/07/1991
Defendant: NIMCO SHREDDING CO
Law(s): TSCA 6E
Violation(s): Required records maintenance
Pollutant(s): PCBs
Facility: NIMCO SHREDDING CO
Address: NEWARK, NJ 07105
Penalty (\$): 9,500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-89-0222 Case Name: RUTGERS STATE UNIVERSITY (NJ)
Type: RCRA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 06/30/1989 Conclusion Date: 03/29/1990
Defendant: RUTGERS STATE UNIVERSITY
Law(s): RCRA
Violation(s): General facility requirements
Facility: RUTGERS THE STATE UNIVERSITY
Address: NEWARK, NJ 07102
Penalty (\$): 10,000 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Civil Court Case 02-89-0234 Case Name: PASSAIC VALLEY SEWERAGE COMMIS
File Date: 08/04/1989 Conclusion Date: 09/07/1989
Defendant: PASSAIC VALLEY SEWERAGE COMMIS
Law(s): MPRSA 101
Violation(s): MPRSA
Pollutant(s): SLUDGE
Facility: PASSAIC VALLEY SEWERAGE COMMIS
Address: 600 WILSON AVE
NEWARK, NJ 07105
Penalty (\$): Superfund Cost Awarded (\$):
Judicial District: DNJ Docket Number: 89-3340
Result: Consent instrument with no penalty

932520042

Stanley Tools

932520044

Facility Name: STANLEY TOOLS Reporting Year: 1993
Street : 140 CHAPEL STREET
City : NEWARK State: NJ Zip: 071050000
County : ESSEX EPA ID: NJD002454049
Mailing Address: 140 CHAPEL STREET
Mailing City : NEWARK State: NJ Zip: 071050000
Year: 1993 Total Waste Federal Wst. RCRA Waste
Tons Generated : 9.86 0.00 0.00
Tons Shipped : 9.86 0.00 0.00
SIC Code(s):
Contact: REYNOLD L HOOVER Phone: 2038273876
Generator Status : Large Quantity Generator (LQG)
Storage Status : No RCRA-permitted or interim status storage
RCRA TDR Status : No on-site TDR; site has no plans to develop system
Exempt TDR Status: No on-site TDR; site has no plans to develop system

List of wastes generated by this facility:

Waste Desc.: UNDRAINED ELECTRICAL TRANSFORMERS CONTAINING PCBS
This is state-only waste (no Federal waste codes).
State waste code(s): X753
Tons Generated: 9.86
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
ENSR RAFF RD FAC
CANTON, OH
System type: M141
Tons sent: 9.86 EPA ID: OHD981100969

43



Rollins

December 15, 1986

Environ
210 Carnegie Center
Suite 201
Princeton, NJ 08540

Attention: Ms. Lisa Brooks

Re: Test Report RES 607

Dear Ms. Brooks:

On November 20, 1986, four (4) samples were received in the RES (NJ) Inc. laboratory for PCB analysis. The samples were taken by RES (FS) personnel and were described as wood floor samples contaminated with oil. The samples were identified as 447A 270101, 447A 270201, 447A 270301 and 447A 280101.

The samples were analyzed per methods outlined in SW 846, "Test Methods for Evaluation, Solid Waste", July 1982. The test results are as follows:

<u>Sample</u>	<u>PCB Concentration</u>
447A 2701 01	1.3 mg/kg as aroclor 1254
447A 2702 01	<1.0 mg/kg total PCB
447A 2703 01	<1.0 mg/kg total PCB
447A 2801 01	1.8 mg/kg as aroclor 1254

If you should have any questions concerning this analysis, please do not hesitate to call me at (609) 467-3100.

Sincerely,

Warren VanArsdall
Project Chemist

cc: D. Herwig, RES(FS)

932520046

Summary of Analytical Results for Soil, Sediment, Surface Water, and Wood Block Samples by Sampling Location*

Phase One Sampling, October 1986

Stanley Tools, ECRA Case No. 85178

2601	Parameter	Sample: Depth (feet):	01 0.0-1.0	02 4.0-4.5	03 6.5-7.5
Sample Type: HSAB	Benzene		ND	ND	ND
Matrix: Soil	Toluene		ND	ND	ND
	TPHC		1,250,000	79,600	1,510,000
	Xylenes		ND	ND	590

2602	Parameter	Sample: Depth (feet):	01 0.0-1.0	02 4.0-5.0
Sample Type: HSAB	Benzene		ND	ND
Matrix: Soil	Toluene		ND	ND
	TPHC		260,000	775,000
	Xylenes		ND	ND

2701 and 2801			
Wood Block			
Chip Samples	Parameter	Sample:	01
2701	PCBs (Aroclor 1254)		1,300
2702	PCBs		ND
2703	PCBs		ND
2801	PCBs (Aroclor 1254)		1,800

* All results reported as concentrations in parts per billion (ppb).
C Indicates value was corrected for method blank contamination.

ND Not Detected
-- Analysis not requested

APPENDIX 6

QUESTION #14.A: SAMPLING PLAN
for
STANLEY TOOLS
140 Chapel Street
Newark, Essex County
New Jersey

ECRA Case #85-178

Submitted May, 1985
Revised May, 1986
Revised September, 1986

Prepared by
ENVIRON Corporation
210 Carnegie Center, Suite 201
Princeton, New Jersey

932520048

Stanley Tools

ECRA Case #85-178

II. AREAS OF ENVIRONMENTAL CONCERN (continued)

The first AEC is a small area of discolored soil in front of Building No. 53. The discoloration appears to be associated with a roof drain which discharges onto this area.

The second AEC is a long, narrow strip of discolored soil located between Building No. 50, the parking lot, and the fence along Lister Avenue. This area is a topographic low point and receives drainage from much of the property. As described in Appendix 8, the soil in this area has been sampled (Sample location #1) and found to contain lead at concentrations above ECRA cleanup guidelines.

AEC 3 is the discolored soil located in the vicinity of a transformer. ~~(In the mid-1970s, this transformer, which contained PCBs, caught fire, causing the transformer hatch to fail. No records exist to indicate whether the soils around this transformer were tested for PCBs. The area was cleaned up, the transformer was repaired and put back into service with new non-PCB containing oil.~~ In April 1975, two soil samples were collected in this area (Samples #2, #3) and found to contain chromium and lead at concentrations exceeding ECRA cleanup guidelines.

AEC 4 is a small area of discolored soil located in an area draining a storage shed in which virgin materials were stored.

A strip of discolored soil (AEC 5) is located along a driveway. Soil in this area has been sampled (Sample #4) and found to contain lead concentrations exceeding ECRA cleanup guidelines.

56
STANLEY

THE STANLEY WORKS

Since 1843

NEW BRITAIN, CONNECTICUT 06050

(203) 225-5111

May 24, 1985

Mr. Anthony J. McMahon, Chief
Bureau of Industrial Site Evaluation
Division of Waste Management
New Jersey Department of Environmental Protection

Re: Stanley Tools
140 Chapel Street
Newark City, Essex County
ECRA Case #85-178

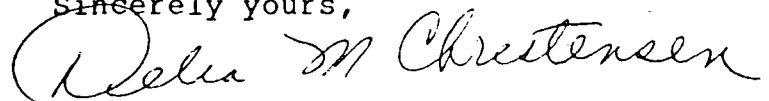
Dear Mr. McMahon:

In accordance with our request for extension, I am enclosing the Site Evaluation Submission for the above mentioned facility.

We would appreciate a meeting to discuss the sampling plan at your earliest convenience.

Should you have any questions, please contact me at the Stanley Laboratory.

Sincerely yours,



Delia M. Christensen
Chief Chemist - Environmental Science
Stanley Laboratory
1309 Corbin Avenue
New Britain, CT 06053
(203) 225-5111 - Ext. 5211

jzz

932520050

To test underground tank integrity, a number of borings will be placed around existing tanks (see Figure 14.2) which are either not currently in use or cannot be filled for testing without having substantial amounts of product left in them at the projected date of plant closure. Three tanks have been identified which can be filled and, therefore, will be Petrotite tested. These include a 10,000 gallon fuel oil tank on the east side of Building 26-A and two 1,000 gallon tanks located in the alleyway between Buildings 21 and 51 (see Figure 14.2). One of these tanks contains quench oil. The other contains #2 fuel oil.

Finally, the fluid in the ten transformers located on the site (see Figure 14.1) will be tested for PCBs. All available information suggests that PCBs are not in use. However, testing will be done to insure that this understanding is correct. *PCBs previously used in sme, check surrounding soils*

SAMPLING AND ANALYTICAL METHODOLOGY

DRAI protocols for monitoring well installation and soil and groundwater sampling will be followed. These protocols have been previously submitted to the NJDEP, Bureau of Industrial Site Evaluation.

WELL CONSTRUCTION

Boreholes will be augered or rotary drilled. Well construction will include PVC casing and screen. The wells will be air developed with further development, if necessary, by pumping or bailing prior to sampling. Well specifications are shown in Figures 14.3 and 14.4. All wells will be surveyed and water table/potentiometric data will be obtained.

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Presentation of the
ECRA Sampling Plan Results
for
Stanley Tools
Newark, New Jersey

Volume I of IV
ECRA Case No. 85178

April, 1987

Prepared for:

Stanley Tools, a Division of
The Stanley Works
New Britain, Connecticut 06053

Prepared by:

ENVIRON Corporation
210 Carnegie Center
Princeton, New Jersey 08540

932520052

water table. Miscellaneous fill was encountered to approximately 2 feet. The soils below the fill were variable, including brown silty sand and red clay and silt. Three samples were taken and analyzed for TPHCs, VOCs with MEK, Cd, Cr and Pb. TPHCs, Cd and Pb exceeded ECRA cleanup guidelines in the upper sample. TPHCs and Pb exceeded the cleanup guidelines in the intermediate sample. Cr and VOCs with MEK were not detected above ECRA cleanup guidelines in either the upper or intermediate sample. No contaminants were present at concentrations exceeding ECRA cleanup guidelines in the lower sample.

AEC 3 is the soil, north of Building 51, in the vicinity of a transformer whose hatch failed during a fire. HSAB 301, drilled near a roof drain, encountered perched ground water at 1 foot; two samples were collected, and drilling was terminated at 2 feet. HSAB 302 was drilled to 12 feet, and four samples collected. The water table was 10 feet below grade. Fill was observed to a depth of about 6 feet. Sediments beneath the fill were predominantly orange-brown to red-brown silt and sand with gravel. A hydrocarbon odor was noted below 6 feet. The six soil samples collected were analyzed for TPHCs, Cd, Cr, Pb, PCBs, total dioxins and total furans. TPHCs were detected above ECRA cleanup guidelines in all samples. Cd, Cr and Pb were found at concentrations exceeding cleanup guidelines in both surface samples. Cd and Pb also exceeded cleanup guidelines in the 1.2 to 2.0 foot sample from HSAB 301 and 4.0 to 4.5 foot sample in HSAB 302, but Cr did not occur above ECRA

cleanup guidelines in these samples. PCBs were detected in the 6.5 to 7.5 and 9.5 to 10.0 foot samples from HSAB 302, but in concentrations below cleanup guidelines. Dioxins were found only in the surface and 4.0 to 4.5 foot samples from HSAB 302 at concentrations below 3 ppb. No furans were detected. Except for TPHCs, the concentrations of chemicals in the two lower samples from HSAB 302 were all below ECRA cleanup guidelines.

AEC 4 is the discolored soil in a drainage area for a storage shed. One HSAB (401) was drilled to a depth of 4 feet and did not enter the water table. The second split spoon, begun at 4 feet, breached a storm sewer pipe from 4.5 to 6.0 feet. The soils above the pipe consisted of dark brown and red sands and silts. Two soil samples were collected from this AEC and were analyzed for TPHCs, VOCs with MEK, Cd, Cr, and Pb. Cd and Pb were found in concentrations exceeding ECRA cleanup guidelines in both samples. TPHCs were detected at concentrations exceeding ECRA cleanup guidelines in the lower sample. VOCs with MEK were detected at concentrations of less than 15 ppb in both samples, below the ECRA cleanup guideline.

AEC 5, previously found to contain Pb levels exceeding the ECRA cleanup guideline, is a strip of discolored soil bordering a fence and a driveway along Lister Avenue. One HSAB (501) was drilled to a depth of 12 feet. The water table was encountered at approximately 10 feet. The soils encountered by this boring consisted primarily of brown slag in the upper 1.8 feet, followed by red brown sands and

layer at approximately 8 feet. A petroleum odor was detected from approximately 6 to 8 feet. Five soil samples were collected from these borings and analyzed for TPHCs and BTX. A lower sample was not collected from HSAB 2602. All soil samples, excluding the intermediate sample from boring 2601, contained levels of TPHCs in excess of ECRA cleanup guidelines. BTX were not detected in any samples, except 590 ppb of xylenes in the lower sample of HSAB 2601. This level is below ECRA cleanup guidelines.

AEC 27 is an area of oil-stained wood block flooring in the western end of Building 21A. Three chip samples were obtained from the surface of the floor and were analyzed for PCBs. PCBs (as Aroclor 1254) were detected in one of the three samples at a level below the ECRA cleanup guidelines for PCBs in soils.

AEC 28 is the section of oil-stained wood block floor in the eastern end of Building 21A. One chip sample was obtained from the surface of this area and was analyzed for PCBs. One PCB (Aroclor 1254) was detected at a concentration below the ECRA cleanup guidelines in soils.

AEC 32 is an unlined trench located within Building 20A along the eastern wall. Five HABs (3201 - 3205) were drilled in the trench. Clayey sand fill was encountered in all five borings, which were drilled to depths ranging from 0.5 to 2.0 feet. Two soil samples were collected from 3201, 3202, 3204, and 3205; one sample was collected from 3203. At times, metal debris or a hydrocarbon odor was noted. Soil samples collected from the five HABs were

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PRESENTATION OF
PHASE II SAMPLING RESULTS,
INCLUDING A PARTIAL CLEANUP PLAN
AND PHASE III GROUND WATER INVESTIGATION
FOR THE STANLEY TOOLS NEWARK SITE

ECRA Case No. 85178

Attachment A:
Summary Tables of Analytical Data

Prepared for

The Stanley Works
New Britain, CT

Prepared by

ENVIRON Corporation
Princeton, NJ

May 1990

932520056

NET MID-ATLANTIC, INC.

Report of Results

PESTICIDE/PCB ANALYSIS

Client: ENVIRON
 Sample ID: 447H-0703-S801
 % Moisture: 15.23

Report #: 90-0219
 NET-Mid ID: 35027

	ug/kg		ug/kg
Aldrin	7 U	a-BHC	7 U
b-BHC	4 3=.02	d-BHC	7
g-BHC (Lindane)	7 U	Chlordane	120 U
4,4'-DDD	7 U	4,4'-DDE	7 U
4,4'-DDT	12 U	Dieldrin	7 U
Endosulfan I	7 U	Endosulfan II	7 U
Endosulfan Sulfate	12 U	Endrin	24 U
Endrin Aldehyde	12 U	Heptachlor Epoxide	7 U
Toxaphene	470 U	Heptachlor	7 U
Aroclor 1016	120 U	Aroclor 1221	120 U
Aroclor 1232	120 U	Aroclor 1242	120 U
Aroclor 1248	120 U	Aroclor 1254	120 U
Aroclor 1260	120 U		

- J Indicates compound was analyzed for but not detected (eg. 10U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets identification criteria or the result is less than the specified detection limit. (e.g. If the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3 J.)

932520057

000034

NET MID-ATLANTIC, INC.

Report of Results

PESTICIDE/PCB ANALYSIS

Client: ENVIRON

Sample ID: 447H-0704-SBQ

% Moisture: 7.80

Report #: 90-0219

NET-Mid ID: 35028

	ug/kg		ug/kg
Aldrin	7 U	a-BHC	7 U
β-BHC	13 U	δ-BHC	7 U
γ-BHC (Lindane)	7 U	Chlordane	110 U
4,4'-DDD	7 U	4,4'-DDE	7 U
4,4'-DDT	11 U	Dieldrin	7 U
Endosulfan I	7 U	Endosulfan II	7 U
Endosulfan Sulfate	11 U	Endrin	22 U
Endrin Aldehyde	11 U	Heptachlor Epoxide	7 U
Toxaphene	430 U	Heptachlor	7 U
Aroclor 1016	110 U	Aroclor 1221	110 U
Aroclor 1232	110 U	Aroclor 1242	110 U
Aroclor 1248	110 U	Aroclor 1254	110 U
Aroclor 1260	110 U		

- U Indicates compound was analyzed for but not detected (eg. 10U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets identification criteria or the result is less than the specified detection limit. (e.g. If the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3 J.)

932520058

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NET MID-ATLANTIC, INC.

Report of Results

PESTICIDE/PCB ANALYSIS

Client: ENVIRON

Sample ID: 447H-0702-SB01

% Moisture: 14.73

Report #: 90-0219

NET-Mid ID: 35029

	ug/kg		ug/kg
Aldrin	7 U	a-BHC	7 U
β-BHC	14 U	δ-BHC	17
γ-BHC (Lindane)	66	Chlordane	120 U
4,4'-DDD	7 U	4,4'-DDE	7 U
4,4'-DDT	12 U	Dieldrin	22
Endosulfan I	7 U	Endosulfan II	31
Endosulfan Sulfate	12 U	Endrin	23 U
Endrin Aldehyde	12 U	Heptachlor Epoxide	11
Toxaphene	470 U	Heptachlor	7 U
Aroclor 1016	120 U	Aroclor 1221	120 U
Aroclor 1232	120 U	Aroclor 1242	120 U
Aroclor 1248	120 U	Aroclor 1254	120 U
Aroclor 1260	120 U		

- U Indicates compound was analyzed for but not detected (eg. 10U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- E This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets identification criteria or the result is less than the specified detection limit. (e.g. If the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3 J.)

932520059

G00000

NET MID-ATLANTIC, INC.
Report of Results

PESTICIDE/PCB ANALYSIS

Client: ENVIRON
Sample ID: 447H-0703-S801
% Moisture: 15.23

Report #: 90-0219
NET-Mid ID: 35027

	ug/kg		ug/kg
Aldrin	7 U	α-BHC	7 U
β-BHC	4 B= .02	δ-BHC	7
γ-BHC (Lindane)	7 U	Chlordane	120 U
4,4'-DDD	7 U	4,4'-DDE	7 U
4,4'-DDT	12 U	Dieldrin	7 U
Endosulfan I	7 U	Endosulfan II	7 U
Endosulfan Sulfate	12 U	Endrin	24 U
Endrin Aldehyde	12 U	Heptachlor Epoxide	7 U
Toxaphene	470 U	Heptachlor	7 U
Aroclor 1016	120 U	Aroclor 1221	120 U
Aroclor 1232	120 U	Aroclor 1242	120 U
Aroclor 1248	120 U	Aroclor 1254	120 U
Aroclor 1260	120 U		

- U Indicates compound was analyzed for but not detected (eg. 10U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets identification criteria or the result is less than the specified detection limit. (e.g. If the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3 J.)

932520060

000115

NET MID-ATLANTIC, INC.

Report of Results

PESTICIDE/PCB ANALYSIS

Client: ENVIRON

Sample ID: 447H-0704-SB01

% Moisture: 7.80

Report #: 90-0219

NET-Mid ID: 35026

	ug/kg		ug/kg
Aldrin	7 U	a-BHC	7 U
b-BHC	13 U	d-BHC	7 U
g-BHC (Lindane)	7 U	Chlordane	10 U
4,4'-DDD	7 U	4,4'-DDE	7 U
4,4'-DDT	11 U	Dieldrin	7 U
Endosulfan I	7 U	Endosulfan II	7 U
Endosulfan Sulfate	11 U	Endrin	22 U
Endrin Aldehyde	11 U	Heptachlor Epoxide	7 U
Toxaphene	430 U	Heptachlor	7 U
Aroclor 1016	110 U	Aroclor 1221	110 U
Aroclor 1232	110 U	Aroclor 1242	110 U
Aroclor 1248	110 U	Aroclor 1254	110 U
Aroclor 1260	110 U		

- U Indicates compound was analyzed for but not detected (eg. 10U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets identification criteria or the result is less than the specified detection limit. (e.g. If the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3 J.)

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000132

NET MID-ATLANTIC, INC.

Report of Results

PESTICIDE/PCB ANALYSIS

Client: ENVIRON

Sample ID: 447H-0702-SB01

% Moisture: 14.73

Report #: 90-0219

NET-Mid ID: 35029

	ug/kg		ug/kg
Aldrin	7 U	a-BHC	7 U
b-BHC	14 U	d-BHC	17
g-BHC (Lindane)	66	Chlordane	120 U
4,4'-DDD	7 U	4,4'-DDE	7 U
4,4'-DDT	12 U	Dieldrin	22
Endosulfan I	7 U	Endosulfan II	31
Endosulfan Sulfate	12 U	Endrin	23 U
Endrin Aldehyde	12 U	Heptachlor Epoxide	11
Toxaphene	470 U	Heptachlor	7 U
Aroclor 1016	120 U	Aroclor 1221	120 U
Aroclor 1232	120 U	Aroclor 1242	120 U
Aroclor 1248	120 U	Aroclor 1254	120 U
Aroclor 1260	120 U		

- U Indicates compound was analyzed for but not detected (eg. 10U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- E Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets identification criteria or the result is less than the specified detection limit. (e.g. If the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3 U.)

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000149

METHOD BLANK SUMMARY

REPORT #90-0219

[illegible]

COMMENTS: _____

000197

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**PRESENTATION OF
PHASE III SAMPLING RESULTS AND
REVISED SOIL CLEANUP PLAN AND
GROUND WATER CLEANUP PLAN FOR
STANLEY TOOLS, NEWARK, NEW JERSEY**

**ECRA Case No. 85178
Volume I of II**

Prepared for

The Stanley Works
New Britain, Connecticut

Prepared by

ENVIRON Corporation
Princeton, New Jersey

April 1992

932520064

above the proposed subsurface soil standards at any boring. Remediation of AEC 8 is proposed in Chapter V.

6. AEC 14

AEC 14 is a small area of discolored soil near the northeastern corner of Building 1 (Plate 3). Boring 1401 was drilled to 11.0 feet during the Phase I sampling program and samples were collected from 0.0 to 1.0 feet bgs and 10.0 to 11.0 feet bgs for analysis of cadmium, chromium, lead, TPHCs, and VOCs. Poorly sorted fill containing 6.5 feet of blocky green glass was encountered until 9 feet. Lead (1,101 ppm) and TPHCs (6,250 ppm) were detected in the 0.0 to 1.0-foot sample. During Phase III, boring 1402 was drilled immediately adjacent to boring 1401 to a depth of 2.5 feet bgs, and samples were collected at 0.5 to 1.0 feet for BN analysis and at 2.0 to 2.5 feet for analysis of TPHCs, BNs (if the 0.5 to 1.0-foot sample exceeded former informal action levels of 10 ppm CaPAHs and 100 ppm total BNs), cadmium, chromium, and lead. The BN benzo(a)pyrene (BaP) was detected in the 0.5 to 1.0-foot sample at 0.85 ppm, which is slightly above the proposed surface soil cleanup standard (0.66 ppm); and polychlorinated biphenyls (PCBs) were detected as a tentatively identified compound (TIC) at an estimated concentration of 21.8 ppm. To accurately quantify the PCB levels detected by GC/MS, the 0.5 to 1.0-foot sample was reextracted and analyzed for PCBs using Method 8080. Although the sample exceeded the method holding time, PCBs were detected at 39.4 ppm. Analysis of the 2.0 to 2.5-foot sample for cadmium, chromium, lead, and TPHCs did not detect any contaminants at levels exceeding the proposed cleanup standards. Remediation of the BaP, lead and PCB-contaminated surface soil (0 to 2 feet bgs) is proposed in Section V.

7. AEC 15

AEC 15 is a small area of discolored soil northeast of Building 1. During Phase I, boring 1501 was drilled to 12 feet and soil samples were collected at 0.0 to 1.0 feet and 11.0 to 12.0 feet bgs for analysis for cadmium, chromium, lead, TPHCs, and VOCs. Fill containing green glass was found to 11 feet. TPHCs were detected at 3,730 ppm in the

surface sample and at 2,270 ppm in 11.0 to 12.0-foot sample. The other contaminants were not detected above the informal soil cleanup standards.

In January 1992, boring 1502 was drilled immediately adjacent to boring 1501 and a soil sample was collected from 0.5 to 1.0 feet bgs for BN analysis. Three attempts were made to acquire a 2.0 to 2.5-foot sample, but the presence of 2 to 4-inch green glass prevented recovery of the sample. BNs were not detected above the NJDEPE's proposed surface soil cleanup standards in the 0.5 to 1.0-foot sample. Based on the analytical results (Plate 3) of soil samples collected at borings 1501 and 1502, further soil sampling and remediation are not warranted in this AEC.

8. AEC 16

AEC 16 is an area of discolored soil northeast of Building 2A in the vicinity of a transformer (see Plate 3). During the Phase I investigation, samples were collected at three depths from three soil borings for a total of nine samples. These samples were analyzed for TPHCs and PCBs. PCBs were not detected in any sample. TPHCs exceeded the former informal ECRA action levels in eight of the nine samples at concentrations ranging from nondetect to 2,340 ppm in the surface (0.0 to 1.0-foot) and intermediate (5.0 to 7.5-foot) samples, and at 7,970 to 16,600 ppm in the samples collected from above the water table. TPHC contamination above the water table (7.0 to 10.0 feet bgs) is believed to be associated with the former underground tanks in AEC 25, which were upgradient of AEC 16. This contamination is addressed by the ground water remediation proposed in Chapter VI. In January 1992, boring 1604 was drilled immediately adjacent to boring 1602, and samples were collected at 0.0 to 0.5 feet and 2.0 to 2.5 feet bgs for BN analysis (BN analysis in the 2.0 to 2.5-foot sample was only to occur if levels in the 0.0 to 0.5-foot sample exceeded the informal BN cleanup levels). Figure IV-2 displays the sampling locations and significant analytical results. Individual BNs were not detected above the recently proposed surface soil cleanup standards in the 0.0 to 0.5-foot sample; therefore, BNs were not analyzed for in the 2.0 to 2.5-foot sample. However, PCBs were detected as a TIC at an estimated level of 42 ppm. Accordingly, ENVIRON directed the laboratory to reextract the sample and analyze it for PCBs using USEPA Method 8080. The results of this testing

indicated non-detectable levels. Based on the analytical results, one additional soil sample will be collected in conjunction with the Cleanup Plan for the site to confirm the absence of PCBs.

9. AEC 18

AEC 18 is a large area of discolored soil adjacent to Buildings 1 and 2A. Three soil samples at varying depths from one boring (1801) were previously collected and analyzed for TPHCs. TPHCs were detected above the former informal action levels at 830 ppm and 12,200 ppm in the surface (0.0 to 0.5-foot) and deep (9.0 to 10.0-foot) samples, respectively. ENVIRON believes the surface contamination to be the result of a surface spill, whereas the deeper TPHC contamination is the result of fuel-oil contamination at the water table from the fuel oil tank in AEC 23, upgradient of AEC 18. This deeper contamination is addressed in Chapter VI. In conformance with the NJDEPE's October 10, 1991 conditional approval letter, three hand auger borings were drilled to 0.5 foot bgs. Boring 1802 was drilled immediately adjacent to boring 1801; borings 1803 and 1804 were drilled on the northwest and southeast portions of AEC 18 to gather additional TPHC data to verify that the 830 ppm TPHC level (Phase I boring 1801) represented a worst-case level. TPHCs were present in borings 1803 and 1804 at 335 ppm and 707 ppm, respectively. These TPHC levels are less than that detected in boring 1801; therefore, BNs were analyzed for in the 0.0 to 0.5-foot sample from boring 1802, which was drilled immediately adjacent to boring 1801. Individual BNs were not detected above the recently proposed surface soil cleanup standards in this sample. Based on the analytical results (Plate 3), further sampling and remediation are not warranted at AEC 18.

10. AEC 20

AEC 20 is a large area of slightly discolored soil that straddles the railroad in the portion of the site west of Chapel Street. During past investigations, three soil borings (2001, 2002, and 2003) and two test pits (TP22 and TP26) were installed. Two samples were collected from each boring, and TPHCs were detected at 478 to 2,090 ppm in the upper (0.0 to 0.5-foot) samples from the three borings. TPHCs were detected at a

at the site, which is almost entirely confined to surface soils. Consequently, no remediation is proposed for zinc at depths greater than 2 feet.

The actual levels of contaminants that will remain on the site following remediation can be interpreted from Plates 2 to 4.

C. Scope of Cleanup

Earlier communications with the NJDEPE, site remediation activities, and further site characterization resulted in identifying some AECs that do not require further remediation. The AECs requiring no further action as agreed to by NJDEPE include AECs 21, 23, 26, 27, 28, 31, 38, 44, and 45 (see Table I-1). The AECs where remediation has been completed but has not been formally approved by NJDEPE are AECs 29 and 30. The AECs that do not appear to require remediation based on further site characterization include AECs 4, 15, 18, 37, 39, 41, and 42. However, based on the cleanup objectives for this site, AECs 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19, 20, 22, 24, 25, 32, 33, 34, 35, 36, and 43 require remediation. Confirmatory samples to be collected at AECs 16 and 40 will be used to evaluate the need for remediation at these AECs.

Table V-1 lists the AECs targeted for remediation and Plate 6 depicts their locations. Soils in most of these areas contain inorganic constituents such as lead, arsenic, copper, and zinc above the proposed cleanup standards. Other areas contain TPHCs and/or BNs above the proposed cleanup standards. There are also areas with soils containing elevated levels of both inorganics and organics (TPHCs and/or BNs). Finally, one location was found to have PCB-contaminated soils.

An estimate of the area and quantity of soil in each AEC requiring remediation is based on the results of the Phase I, II, and III sampling programs, field observations made during these investigations, knowledge of the operating history of the site, depth to ground water, and feasibility of the implementation of a remedy. In some instances, areas targeted for remediation were extended beyond the original AEC demarcation based on the distance to the nearest "clean" sample location or on judgments as to the possible extent of contamination within an AEC, information available on previous interim remedial measures, or until a physical barrier, such as a building or wall, was reached. The following sections describe in greater detail the extent of remediation proposed for individual AECs.

remediation is about 18 feet x 30 feet (see Plate 6) and the estimated soil quantity is 80 cy.

10. AEC 14

AEC 14, a small area of discolored soil, is located near the northeastern corner of Building 1. Analysis of surface and subsurface soil samples from this AEC indicates that the only organic contaminant present at a level exceeding the NJDEPE's proposed cleanup standards is PCB (Aroclor 1254), which was detected at a concentration of 39.4 ppm in a surface soil sample. In addition, lead was also detected in surface soils above the proposed surface soil cleanup standard of 600 ppm. Soil from an area of 8 feet by 14 feet will be removed to a depth of 2 feet bgs and stockpiled separately for disposal or treatment in accordance with applicable regulatory standards for PCB-contaminated soil; the estimated soil volume is about 8 cy. The area of lead contamination is about 75 square feet. The proposed remediation for lead contamination is to a depth of 2 feet and would consist of approximately 5 cy of soils.

11. AEC 16

AEC 16 is an area of discolored soil northeast of Building 2A in the vicinity of a transformer. Soil samples analyzed from AEC 16 did not contain TPHCs or BNs at levels exceeding the NJDEPE's recently proposed soil cleanup standards. However, as indicated in Section III, PCBs were detected in the TIC fraction at an estimated level of 42 ppm. Therefore, one additional sample will be collected for PCB analysis from AEC 16 to determine the volume of soil, if any, requires remediation. If remediation is required, soil will be either treated or disposed of in accordance with applicable regulations.

12. AECs 17 and 25

AEC 17 is an area of discolored soils on the southwestern side of Building 2C which is adjacent to AEC 25, the location of a former 10,000-gallon fuel oil storage tank. A number of shallow soil samples (0 to 1.0 foot deep) collected from these AECs contained TPHCs at levels exceeding 30,000 ppm, a concentration above which soils are

TABLE B-6: Summary of Soil Results for AEC 14

ENVIRON SAMPLE ID	4471-1402-SB01	4471-1402-SB02
LABORATORY ID	FE3289 ENV04471	FE3290 ENV04471
MATRIX	SOIL	SOIL
COLLECTION METHOD	HAB	HAB
DEPTH (feet)	0.5-1.0	2.0-2.5
COLLECTION DATE	01/06/92	01/06/92
COMMENTS		
Priority Pollutant Metals		
Cadmium		3.30
Chromium		16.00
Lead		52.00
Petroleum Hydrocarbons		
		ND
PCBs		
Aroclor 1254	39.40	
Carcinogenic PAHs		
Benzo(a)anthracene	1.54	
Benzo(a)pyrene	0.85	
Benzo(b)fluoranthene	1.26	
Benzo(k)fluoranthene	ND	
Dibenzo(a,h)anthracene	ND	
Chrysene	1.90	
Indeno(1,2,3-c,d)pyrene	0.58	
Total Carcinogenic PAHs	6.13	
Base Neutral Compounds		
1,2-Dichlorobenzene	ND	
1,3-Dichlorobenzene	ND	
1,4-Dichlorobenzene	ND	
Acenaphthene	0.28	
Acenaphthylene	ND	

Concentrations are in ppm.

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ENVIRON

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**PRESENTATION OF
PHASE III SAMPLING RESULTS AND
REVISED SOIL CLEANUP PLAN AND
GROUND WATER CLEANUP PLAN FOR
STANLEY TOOLS, NEWARK, NEW JERSEY**

**ECRA Case No. 85178
Attachment 1:
Summary of Phase I-III Sampling Results**

Prepared for

The Stanley Works
New Britain, Connecticut

Prepared by

ENVIRON Corporation
Princeton, New Jersey

April 1992

932520071

TABLE 6
Summary of Soil Results for AEC 3

ENVIRON SAMPLE ID	447A-0302-01	447A-0302-02	447A-0302-03	447A-0302-04	447H-TP02-GS01	447H-TP02-GS02
MATRIX	SOIL	SOIL	SOIL	SOIL	Soil	Soil
COLLECTION METHOD	HSAB	HSAB	HSAB	HSAB	Scoop	Scoop
DEPTH (feet)	0.0-0.5	4.0-4.5	6.5-7.5	9.5-10.0	0.0-0.5	10.5-11.0
COLLECTION DATE	10/14/86	10/14/86	10/14/86	10/14/86	1/15/90	1/15/90
COMMENTS						
Priority Pollutant Metals						
Antimony					25.00	12.00
Arsenic					4.30	0.78
Beryllium					0.10	ND
Cadmium	28.70	17.50	1.61	1.62	0.80	ND
Chromium	135.00	55.90	3.75	7.24	20.00	3.80
Copper					65.00	9.60
Lead	27740.00 •	2810.00 •	3.36	9.16	1700.00 •	3.00
Mercury					0.57	0.08
Nickel					36.00	9.70
Selenium					ND	ND
Silver					0.40	ND
Thallium					5.00	1.50
Zinc					220.00	26.00
Petroleum Hydrocarbons	6110.00	1160.00	57800.00 •	35800.00 •	377.00	ND
Furans						
Hepta-CDD	ND	ND	ND	ND		
Octa-CDD	ND	ND	ND	ND		
PCBs						
Aroclor 1254	ND	ND	ND	ND		
Aroclor 1260	10.00~J •	0.90~J	2.90 •	1.30		

TABLE 17
Summary of Soil Results For AEC 14

ENVIRON SAMPLE ID	447A-1401-01	447A-1401-02	447A-1401-03	447I-1402-SB01	447I-1402-SB02
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL
COLLECTION METHOD	HSAB	HSAB	HSAB	HAB	HAB
DEPTH (feet)	0.0-1.0	10.0-11.0	10.0-11.0	0.5-1.0	2.0-2.5
COLLECTION DATE	10/20/86	10/20/86	10/20/86	01/06/92	01/06/92
COMMENTS				AROMATIC	AROMATIC
Priority Pollutant Metals					
Cadmium	20.50	1.33			3.30
Chromium	102.00	11.80			16.00
Lead	1101.00	8.36			52.00
Petroleum Hydrocarbons					
	6250.00	ND			ND
PCBs					
Aroclor 1254				39.40	
Aroclor 1260				ND	
Carcinogenic PAHs					
Benzo(a)anthracene				1.54	
Benzo(a)pyrene				0.85	
Benzo(b)fluoranthene				1.26	
Benzo(k)fluoranthene				ND	
Chrysene				1.90	
Dibenzo(a,h)anthracene				ND	
Indeno(1,2,3-cd)pyrene				0.58	
Total Carcinogenic PAHs				6.13	
Base Neutral Compounds					
1,2-Dichlorobenzene				ND	
1,3-Dichlorobenzene				ND	
1,4-Dichlorobenzene				ND	
Acenaphthene				0.28	
Acenaphthylene				ND	
Anthracene				0.43	

PCB
at 6-8'
~ 0.1 ppm
∴ PCB is
delineated
vertically

TABLE 30
Summary of Results for AEC 27

ENVIRON SAMPLE ID	447A-2701-01	447A-2702-01	447A-2703-01
MATRIX	WOOD BLOCK	WOOD BLOCK	WOOD BLOCK
COLLECTION METHOD	CHIP	CHIP	CHIP
DEPTH (feet)	NA	NA	NA
COLLECTION DATE	10/86	10/86	10/86
COMMENTS			

PCBs

Aroclor 1254 1.30

TABLE 31
Summary of Results for AEC 28

ENVIRON SAMPLE ID	447A-2801-01
MATRIX	WOOD BLOCK
COLLECTION METHOD	CHIP
DEPTH (feet)	NA
COLLECTION DATE	10/86
COMMENTS	

PCBs
Aroclor-1254 1.80

The Stanley Works

New Britain, Connecticut

REMEDIAL ACTION WORKPLAN FOR SOILS FOR THE FORMER STANLEY TOOLS FACILITY NEWARK, NEW JERSEY ISRA CASE NO. 85178

ENSR Consulting and Engineering

October 1993

Document Number 6303-056(RAW-SOIL.RPT)

932520076

- AEC 3 - AEC 3 is an area of discolored soil located north of Building 51. Lead was detected above NJDEPE cleanup criteria in this area. Additionally, total petroleum hydrocarbons (TPHCs) were detected above NJDEPE cleanup criteria in a small section of AEC 3.
- AEC 5 - AEC 5 is an area of discolored soil along the northern fenceline and north of Building 24B. TPHCs were detected above NJDEPE cleanup criteria in this area.
- AEC 6 - AEC 6 is an area of discolored soil along the fenceline northeast of Building 24. TPHCs were detected above NJDEPE cleanup criteria in this area.
- AEC 7 - AEC 7 is an area of discolored soil at the location of a former waste storage area. Lead and arsenic were detected above NJDEPE cleanup criteria in this area.
- AECs 8, 9, 10, 11 and 43 - AECs 8, 9, 10, 11 and 43 are collectively referred to as AEC 8. These AECs consist of a strip of land east of Building 20A. Metals were detected above NJDEPE cleanup criteria in this area. In localized areas, TPHCs and BNs were also detected above NJDEPE cleanup criteria.
- AEC 12 - AEC 12 is a narrow strip of land located south of Building 21A. TPHCs and lead were detected above NJDEPE cleanup criteria in this area.
- AEC 13 - AEC 13 is located southwest of Building 22A. TPHCs were detected above NJDEPE cleanup criteria in this area.
- AEC 14 - AEC 14 is a small area of discolored soil located near the northeastern corner of Building 1. PCBs, benzene(a)pyrene and lead were detected above NJDEPE cleanup criteria in this area.
- AEC 17 and 25 - AEC 17 is an area of discolored soil on the southeastern side of Building 2C and adjacent to the former location of a 10,000-gallon fuel oil storage tank (AEC 25). TPHCs were detected above NJDEPE cleanup criteria in these areas. Additionally, lead was detected just slightly above NJDEPE cleanup criteria in AEC 17.
- AEC 19 - AEC 19 is a small area of discolored soil behind the pumphouse in the western portion of the site. Lead was detected above NJDEPE cleanup criteria in this area.

AEC 16

As indicated in Section III of their Cleanup Plan (April 1992), PCB's were detected in the TIC fraction at an estimated level of 42 ppm, but were not detected using Method 8080. A confirmatory soil sample, and duplicate, was collected in AEC 16 to determine if PCB's were indeed present. Results of sample analyses is given in Appendix B.

AEC 17 and 25

A number of shallow soil samples collected from these AECs during previous investigations contained TPHC and lead at levels exceeding the proposed soil cleanup guidelines. Environ proposed to cap this area with an asphalt cap covering an area approximately 30 feet by 25 feet. In order to further delineate the extent of surficial contamination, Environ collected two additional samples from AEC 17 and analyzed them for TPHC and VOC + 15 respectively. Two additional samples collected from AEC 25 were split, creating four total samples, and treated as duplicates that were analyzed for TPHC, and VOC + 15 respectively. In addition to being analyzed for TPHC, one of the duplicate samples collected from 0.0 to 0.5 was also analyzed for BN + 15. Results of these analyses are shown attached in Appendix B.

AEC 18

As requested in the May 19, 1993 letter from NJDEPE, Environ collected an additional sample from this AEC because the previous sample that was analyzed for BN did not meet quality control criteria based on surrogate recoveries. This sample, and its duplicate, was collected from a depth of 0.0 to 0.5 bgs and analyzed for BN + 15.

Waste Oil Tank

It is our understanding that in the time period between the July, 1993 addendum and the sampling date in August, 1993 an UST was discovered beneath building 52. Soil samples were collected at depths of 6.0 to 6.5 fbgs from areas surrounding the tank and analyzed for TPHC. In addition, one of the samples (WT03) was analyzed for BN + 15, VOC + 15, PCBs, and for Priority Pollutant Metals (PPM). Results of these analyses are shown attached in Appendix B.

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

 DATE: 09/28/93
 PAGE: 3

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	02-04471	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Parameters		Sample Points, Sampling Dates, and ETC Sample No.'s							
		WT01-SB01 930826 DB0100	WT01-SB01 930826 DB0100	WT03-SB01 930826 DB0102	WT04-SB01 930826 DB0103				
	Units								
Hexachlorocyclopentadiene	ug/kg	-	-	< 700	-				
Hexachloroethane	ug/kg	-	-	< 100	-				
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	< 300	-				
Isophorone	ug/kg	-	-	12200	-				
Naphthalene	ug/kg	-	-	< 100	-				
Nitrobenzene	ug/kg	-	-	< 136	-				
N-Nitrosodimethylamine	ug/kg	-	-	< 700	-				
N-Nitrosodi-n-propylamine	ug/kg	-	-	< 714	-				
N-Nitrosodiphenylamine	ug/kg	-	-	< 100	-				
Phenanthrene	ug/kg	-	-	< 400	-				
Pyrene	ug/kg	-	-	< 100	-				
1,2,4-Trichlorobenzene	ug/kg	-	-	< 100	-				
Metals Analysis Data									
Antimony	ug/kg	-	-	< 6500	-				
Arsenic	ug/kg	-	-	1200	-				
Beryllium	ug/kg	-	-	300	-				
Cadmium	ug/kg	-	-	< 430	-				
Chromium	ug/kg	-	-	9000	-				
Copper	ug/kg	-	-	8000	-				
Lead	ug/kg	-	-	7200	-				
Mercury	ug/kg	-	-	57	-				
Nickel	ug/kg	-	-	7800	-				
Selenium	ug/kg	-	-	< 540	-				
Silver	ug/kg	-	-	< 1100	-				
Thallium	ug/kg	-	-	< 1100	-				
Zinc	ug/kg	-	-	50000	-				
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	< 52.7	-				
Aroclor 1254	ug/kg	-	-	< 105	-				
Aroclor 1260	ug/kg	-	-	< 105	-				
Aroclor 1248	ug/kg	-	-	< 52.7	-				
Aroclor 1232	ug/kg	-	-	< 52.7	-				
Aroclor 1221	ug/kg	-	-	< 52.7	-				

932520080

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

 DATE: 09/28/91
 PAGE: 4

Chain of Custody Data Required for ETC Data Management Summary Report

See Below

ENVIRON CORPORATION

02-04471

See Below

ETC Sample No.

Company

Facility

Sample Point

Date

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s					
		WT01-SB01 930826 DB0100	WT01-SB01 930826 DB0100	WT03-SB01 930826 DB0102	WT04-SB01 930826 DB0103		
Aroclor 1248	ug/kg	-	-	52.7	-		
Miscellaneous Parameters	(ppm)						
Petroleum Hydrocarbons (IR)	mg/kg	29.9	29.9	54.8	20.4	10,000	10,000
Petroleum Hydrocarbons (IR)	mg/kg	29.9	29.9	-	-		

Footnotes: BMDL=Below Method Detection Limit MD=Parameter not detected -=Parameter not tested

24.4

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

 DATE 09/28/93
 PAGE 6

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	ENV04471	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Parameters Units		Sample Points, Sampling Dates, and ETC Sample No.'s							
		PT05-PE01 930827 DBP308	PT06-PE01 930827 DBP309	1702-SB02 930827 DBP311	2503-SB02 930827 DBP312	1802-SB02 930827 DBP313	1802-SB22 930827 DBP314	1604-SB02 930827 DBP315	1604-SB22 930827 DBP316
Hexachlorocyclopentadiene	ug/kg	-	-	-	-	< 800	< 800	-	-
Hexachloroethane	ug/kg	-	-	-	-	< 100	< 100	-	-
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	-	-	1490	1500	-	-
Isophorone	ug/kg	-	-	-	-	36900	20600	-	-
Naphthalene	ug/kg	-	-	-	-	245	263	-	-
Nitrobenzene	ug/kg	-	-	-	-	< 145	< 145	-	-
N-Nitrosodimethylamine	ug/kg	-	-	-	-	< 800	< 800	-	-
N-Nitrosodi-n-propylamine	ug/kg	-	-	-	-	< 800	< 800	-	-
N-Nitrosodiphenylamine	ug/kg	-	-	-	-	< 100	< 100	-	-
Phenanthrene	ug/kg	-	-	-	-	1260	2480	-	-
Pyrene	ug/kg	-	-	-	-	2970	4090	-	-
1,2,4-Trichlorobenzene	ug/kg	-	-	-	-	< 100	< 100	-	-
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1254	ug/kg	-	-	-	-	-	-	< 110	< 108
Aroclor 1260	ug/kg	-	-	-	-	-	-	< 110	< 108
Aroclor 1248	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1232	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1221	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1016	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Miscellaneous Parameters									
Petroleum Hydrocarbons (IR)	mg/kg	-	-	-	-	-	-	-	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

932520081

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**ADDENDUM TO THE APRIL 1992
REVISED SOIL CLEANUP PLAN
FOR STANLEY TOOLS,
NEWARK, NEW JERSEY**

Prepared for

The Stanley Works
New Britain, Connecticut

Prepared by

ENVIRON Corporation
Princeton, New Jersey

July 1993

932520082

soils that contain elevated levels of organic compounds, and that are classified as non-hazardous based on Toxicity Characteristic Leaching Procedure (TCLP) metal analyses, will be recycled (e.g., used as landfill cover material or for the production of asphalt) at an off-site facility. Soils that do not meet the metals criteria for land disposal may have to be stabilized at an approved off-site facility prior to land disposal. Estimated areas and volumes of soil to be excavated are given in Table 1.

The proposed remedy for AECs with contaminant concentrations in surface soils that exceed the proposed direct-contact surface soil cleanup guidelines² (AECs 1, 2, 5, 6 to 11, 14, 17, 19, 20, 22, 24, 25, 26, 32, 33, 36, 37, 39, and 40) is an asphalt cap (see Table 1). Soils in most of these areas contain inorganic constituents such as lead, arsenic, and copper above the proposed cleanup guidelines. Certain of these areas contain TPHCs and/or BNs above the proposed cleanup guidelines. There also are certain areas with soils containing elevated levels of both inorganic and organic compounds. One area contains PCBs above the proposed cleanup criteria. As shown on Table 1 and Plate 1, some of these AECs are already paved. For these AECs, Stanley proposes to examine the integrity of the existing cap, and to seal any cracks that are likely to expose contaminated soils.

For the AECs that are currently unpaved, the specifications of the cap assume future non-residential use of the site. In areas where no traffic is expected, a low load-bearing cap will be installed, consisting of a compacted gravel layer 1 to 2 inches thick, covered by a 2-inch asphalt layer. This option will not involve excavation of soils, but the surface soil will be graded and compacted. At locations where traffic is expected (e.g., parking areas), a load-bearing cap complementary to existing pavements will be installed. In general, these load-bearing caps will consist of 4 inches of compacted gravel, 0-2 inches of stabilized base, and 2 inches of asphalt cap. The areas targeted for the placement of new asphalt caps are

² Neither Stanley nor ENVIRON necessarily agrees that the proposed soil cleanup guidelines form an appropriate basis for the cleanup of the Stanley site. Stanley respectfully reserves its right to petition the NJDEPE to establish alternate cleanup guidelines for the site that appropriately balance the NJDEPE's and Stanley's mutual concern for the protection of human health and the environment and the long-term use of the site.

10. AEC 14

AEC 14 is a small area of discolored soil near the northeastern corner of Building 1. Analysis of surface and subsurface soil samples from this AEC indicates that the organic contaminants present at levels exceeding the NJDEPE's proposed cleanup guidelines are PCBs (Aroclor 1254) and benzo(a)pyrene, which were detected in a surface soil sample at concentrations of 39.4 ppm and 0.85 ppm, respectively. In addition, lead was also detected in surface soils above the proposed surface soil cleanup guideline of 600 ppm. The remedy for this AEC consists of a low load-bearing cap that will extend over the entire unpaved area, as shown on Plate 2. This remedy will not involve the excavation of any soils.

11. AEC 16

GW for PHC & SI for PCB

AEC 16 is an area of discolored soil northeast of Building 2A in the vicinity of a transformer. As indicated in Section III of the Cleanup Plan (April 1992), PCBs were detected in the TIC fraction at an estimated level of 42 ppm, but were not detected when analyzed using Method 8080. Therefore, one additional sample will be collected from AEC 16 to determine if PCBs are present.

Soil samples were also collected for TPHC and BN analyses. TPHC levels in the shallow soil samples (depths up to 7.5 feet) were well below the cleanup guideline of 10,000 ppm. In three soil samples collected at depths near the ground water table, TPHC levels detected in two samples exceeded the proposed cleanup guideline. As accepted by the NJDEPE in its May 19, 1993 letter, TPHC contamination encountered immediately above the ground water table will be addressed through the proposed ground water remedial strategy.

12. AECs 17 and 25

AEC 17 is an area of discolored soils on the southwestern side of Building 2C; this area is adjacent to AEC 25, the location of a former 10,000-gallon fuel oil storage tank. A number of shallow soil samples (from depths of up to 6 feet) collected from these AECs contained TPHCs and lead at levels exceeding the proposed soil cleanup

Mr. William Guerrero
Stanley Works, Inc.
City of Newark, Essex County
ECRA Case No. 85178
Page 18 of 33

- X. AEC-27 - Discolored Wood Block Floor located in the Western Portion of Building 21A; and
AEC-28 - Discolored Wood Block Floor located in the Eastern Portion of Building 21A.

Four chip samples were collected from the floor in the western portion of Building 21A, however, only one of the samples was analyzed for Polychlorinated Biphenyls ("PCB"). An elevated concentration of PCB -- Aroclor 1254 (1.3 ppm) was encountered. One chip sample collected from the floor in the eastern portion of Building 21A also exhibited an elevated concentration of PCB -- Aroclor 1254 (1.8 ppm).

The following comment is based upon Stanley Tools' comments regarding the referenced interior areas referenced in Stanley Tools' comments to the NJDEPE's October 28, 1992 Draft Cleanup Plan Approval letter.

Stanley Tools' stated that it is not appropriate for buildings and structures to be regulated in the NJDEPE's proposed Cleanup Standards for Contaminated Sites. Since the property is to remain for industrial use as proposed by Stanley Tools through their agreement to accept a non-residential use restriction for the referenced property, the NJDEPE shall refer their concerns with building interiors to OSHA.

However, Stanley Tools shall determine whether there has been an impact to the soils beneath the flooring in this building. Stanley Tools shall determine whether there has been an impact to the soils beneath the wood block flooring through the collection of soil samples. Based upon the Case Managers inspection of the flooring, it will not be difficult for Stanley Tools to collect soil samples in this area because many of the wood blocks have been upheaved. Stanley Tools shall collect a minimum of three soil samples from each AEC (27 and 28) from beneath the wood block flooring for Priority Pollutants plus 40 (PP+40) and PHC. If concrete flooring exists beneath the wood block flooring and it can be demonstrated (photo-documentation, etc.) that the concrete flooring is structurally sound (no cracks, holes or deteriorations), the Department may eliminate the sampling requirements for the soils beneath the Building floors referenced above.

- Y. AEC 29 - Area of Discolored Flooring in the Former Pump House in Building 8.

Stanley Tools did not submit a report and sampling data as required by the NJDEPE's October 7, 1991 letter, that details the investigation and remediation conducted in this area. Stanley Tools previously stated that this area was remediated through the removal of the Pump House during the Phase II sampling event. However, NJDEPE records indicate that this area was not addressed during the Phase II sampling event. The NJDEPE again requests that Stanley Tools submit all sampling data collected during the remediation of this area along with a detailed report that describes the work completed in this area.

Stanley Tools' proposal to submit the required information as referenced in the response to the NJDEPE's October 28, 1992 Draft Cleanup Plan Approval is acceptable. Stanley Tools shall submit the required information with the first monthly progress report.

932520085

AnalytiKEM Inc.
28 Springdale Road
Cherry Hill, NJ 08003
609/751-1122
1-800-TRY-LAB1
Fax: 609/751-0824

TEST REPORT NO. A32683

March 22, 1994

Prepared for:

ENSR C & E
One Executive Drive
Somerset, NJ 08873

Attention: Rick Konkowski

Project: Stanely - Newark, NJ

Reviewed &
Approved by:

Name: Gerold J. Miller, Ph.D.

Title: QA/QC Manager

IX. Analytical Results (Cont'd)

Polychlorinated Biphenyls

Sample Designation

<u>Parameter</u>	<u>Method</u>	<u>A32683-1</u>	<u>A32683-2</u>
	<u>Blank</u>	<u>DW</u>	<u>DW-1</u>
Aroclor 1016	500 U	590 U	600 U
Aroclor 1221	500 U	590 U	600 U
Aroclor 1232	500 U	590 U	600 U
Aroclor 1242	500 U	590 U	600 U
Aroclor 1248	500 U	590 U	600 U
Aroclor 1254	500 U	590 U	600 U
Aroclor 1260	500 U	590 U	600 U
Units	(ug/kg)	(ug/kg dw)	(ug/kg dw)

Sample Designation

<u>Parameter</u>	<u>Method</u>	<u>A32683-3</u>
	<u>Blank</u>	<u>FB3/12</u>
Aroclor 1016	500 U	0.50 U
Aroclor 1221	500 U	0.50 U
Aroclor 1232	500 U	0.50 U
Aroclor 1242	500 U	0.50 U
Aroclor 1248	500 U	0.50 U
Aroclor 1254	500 U	0.50 U
Aroclor 1260	500 U	0.50 U
Units	(ug/kg)	(ug/l)

Note: All compounds reported at levels exceeding the PQL have been confirmed by alternate column GC.

**Results of the August 1993
Ground Water Investigation
for Stanley Tools
Newark, New Jersey**

ECRA Case No. 85178

Attachment 1

**NJ Reduced Deliverables Laboratory Data
Package for Soil Samples**

Prepared for

The Stanley Works
New Britain, Connecticut

Prepared by

ENVIRON Corporation
Princeton, New Jersey

March 1994

932520088

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

DATE 09/28/93
PAGE 6

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	ENV0447I	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Sample Points, Sampling Dates, and ETC Sample No.'s

Parameters	Units	PT05-PE01 930827 DBP308	PT06-PE01 930827 DBP309	1702-SB02 930827 DBP311	2503-SB02 930827 DBP312	1802-SB02 930827 DBP313	1802-SB22 930827 DBP314	1604-SB02 930827 DBP315	1604-SB22 930827 DBP316
Hexachlorocyclopentadiene	ug/kg	-	-	-	-	< 800	< 800	-	-
Hexachloroethane	ug/kg	-	-	-	-	< 100	< 100	-	-
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	-	-	1490	1500	-	-
Isophorone	ug/kg	-	-	-	-	36900	20600	-	-
Naphthalene	ug/kg	-	-	-	-	245	263	-	-
Nitrobenzene	ug/kg	-	-	-	-	< 145	< 145	-	-
N-Nitrosodimethylamine	ug/kg	-	-	-	-	< 800	< 800	-	-
N-Nitrosodi-n-propylamine	ug/kg	-	-	-	-	< 800	< 800	-	-
N-Nitrosodiphenylamine	ug/kg	-	-	-	-	< 100	< 100	-	-
Phenanthrene	ug/kg	-	-	-	-	1260	2480	-	-
Pyrene	ug/kg	-	-	-	-	2970	4090	-	-
1,2,4-Trichlorobenzene	ug/kg	-	-	-	-	< 100	< 100	-	-
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1254	ug/kg	-	-	-	-	-	-	< 110	< 108
Aroclor 1260	ug/kg	-	-	-	-	-	-	< 110	< 108
Aroclor 1248	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1232	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1221	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1016	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Miscellaneous Parameters									
Petroleum Hydrocarbons (IR)	mg/kg	-	-	-	-	-	-	-	-

Notes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

932520089

ETC

TABLE 1: QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
AROCLORS - GC ANALYSIS DATA (QR14)

SEP 20, 1993

Chain of Custody Data Required for ETC Data Management Summary Reports

QG32985

QG32985

ETC Sample No.

Company

Facility

Sample Point

Date

Time

DES umber	Compound	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concen. ug/kg	MDL ug/kg	First ug/kg	Second ug/kg	Blank Data ug/kg	Concen. Added ug/kg	% Recov	Unspiked Sample ug/kg	Concen. Added ug/kg	% Recov
DA Aroclor 1242		ND	50	ND	ND	ND	0	-	ND	0	-
DB Aroclor 1254		ND	100	ND	ND	ND	0	-	ND	0	-
DC Aroclor 1260		ND	100	1090	998	ND	1000	97	ND	1080	101
DD Aroclor 1248		ND	50	ND	ND	ND	0	-	ND	0	-
DE Aroclor 1232		ND	50	ND	ND	ND	0	-	ND	0	-
DF Aroclor 1221		ND	50	ND	ND	ND	0	-	ND	0	-
DG Aroclor 1016		ND	50	ND	ND	ND	0	-	ND	0	-

1 zero and variable recoveries have been manually verified.

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932520090

ETC

TABLE 1: QUANTITATIVE RESULTS

AROCLORS - GC ANALYSIS DATA (QR14)

SEP 20, 1993

Chain of Custody Data Required for ETC Data Management Summary Reports

DBP315 ENVIRON CORPORATION

ENV04771

1604-SB02 08-27-93

QG32985

ETC Sample No.

Company

Facility

Sample Point

Date

Time

IPDES Number	Compound	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concen. ug/kg	MDL ug/kg	First	Second	Blank Data	Concen. Added	% Recov	Unspiked Sample	Concen. Added	% Recov
00A Aroclor 1242		ND	55								
00B Aroclor 1254		ND	110								
00C Aroclor 1260		ND	110								
00D Aroclor 1248		ND	55								
00E Aroclor 1232		ND	55								
00F Aroclor 1221		ND	55								
00G Aroclor 1016		ND	55								
All zero and variable recoveries have been manually verified.											

932520091

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ETC

TABLE 1: QUANTITATIVE RESULTS

AROCLORS - GC ANALYSIS DATA (QR14)

SEP 20, 1993

Chain of Custody Data Required for ETC Data Management Summary Reports

DBP316 ENVIRON CORPORATION

ENV0477I

1604-SB22 08-27-93

QG32985

ETC Sample No.

Company

Facility

Sample Point

Date

Time

NPDES Number	Compound	Results		QC Replicate		QC Blank and Spiked Blank			QC Matrix Spike		
		Sample Concen. ug/kg	MDL ug/kg	First	Second	Blank Data	Concen. Added	% Recov	Unspiked Sample	Concen. Added	% Reco.
00A Aroclor 1242		ND	54								
00B Aroclor 1254		ND	110								
00C Aroclor 1260		ND	110								
00D Aroclor 1248		ND	54								
00E Aroclor 1232		ND	54								
00F Aroclor 1221		ND	54								
00G Aroclor 1016		ND	54								

All zero and variable recoveries have been manually verified.

932520092

505

ENVIROTECH RESEARCH, INC.

Client ID: SP-6
Site: Stanley

Lab Sample No: 99157
Lab Job No: G916

Date Sampled: 6/27/94
Date Received: 6/27/94
Date Extracted: 6/27/94
Date Analyzed: 6/28/94
GC Column: DB-608
Instrument ID: PESTGC#2
Lab File ID: 058R0101

Matrix: SOIL
Sample Weight: 30 g
Extract Final Volume: 10 ml
Dilution Factor: 1.0
% Moisture: 11.3
QA Batch No: 2524

ORGANOCHLORINE PCBs METHOD 8080

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/kg</u> <u>(Dry Weight)</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/kg</u>
PCB-1016	ND	95
PCB-1221	ND	95
PCB-1232	ND	95
PCB-1242	ND	95
PCB-1248	ND	95
PCB-1254	310*	95
PCB-1260	ND	200

*Estimated (biased high).

932520093



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NJ Certification No: 12941
Report Date: September 28, 1993

ENVIRON CORPORATION
Project No. 04471

DBP300-16

ENVIRON CORPORATION 02-04471

ETC Sample No.

Company

Facility

Stephen Grant
Laboratory Manager

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

DATE 09/28/99
PAGE 6

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	ENV04471	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Sample Points, Sampling Dates, and ETC Sample No.'s

Parameters	Units	PT05-PE01 930827 DBP308	PT06-PE01 930827 DBP309	1702-SB02 930827 DBP311	2503-SB02 930827 DBP312	1802-SB02 930827 DBP313	1802-SB22 930827 DBP314	1604-SB02 930827 DBP315	1604-SB22 930827 DBP316
Hexachlorocyclopentadiene	ug/kg	-	-	-	-	< 800	< 800	-	-
Hexachloroethane	ug/kg	-	-	-	-	< 100	< 100	-	-
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	-	-	1490	1500	-	-
Isophorone	ug/kg	-	-	-	-	36900	20600	-	-
Naphthalene	ug/kg	-	-	-	-	245	263	-	-
Nitrobenzene	ug/kg	-	-	-	-	< 145	< 145	-	-
N-Nitrosodimethylamine	ug/kg	-	-	-	-	< 800	< 800	-	-
N-Nitrosodi-n-propylamine	ug/kg	-	-	-	-	< 800	< 800	-	-
N-Nitrosodiphenylamine	ug/kg	-	-	-	-	< 100	< 100	-	-
Phenanthrene	ug/kg	-	-	-	-	1260	2480	-	-
Pyrene	ug/kg	-	-	-	-	2970	4090	-	-
1,2,4-Trichlorobenzene	ug/kg	-	-	-	-	< 100	< 100	-	-
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1254	ug/kg	-	-	-	-	-	-	< 110	< 108
Aroclor 1260	ug/kg	-	-	-	-	-	-	< 110	< 108
Aroclor 1248	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1232	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1221	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Aroclor 1016	ug/kg	-	-	-	-	-	-	< 55.2	< 53.9
Miscellaneous Parameters									
Petroleum Hydrocarbons (IR)	mg/kg	-	-	-	-	-	-	-	-

- Parameter not detected - Parameter not tested

932520095



NJ Certification No: 12941

Report Date: September 28, 1993

ENVIRON CORPORATION
Project No. 04471

DBO100-04

ENVIRON CORPORATION 02-04471

ETC Sample No.

Company

Facility

Stephen Grant
Laboratory Manager

932520096

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

 DATE: 09/28/93
 PAGE: 3

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	02-04471	See Below
ETC Sample No.	Company	Facility	Sample Point Date

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	Units	WT01-SB01	WT01-SB01	WT03-SB01	WT04-SB01				
		930826	930826	930826	930826				
		DB0100	DB0100	DB0102	DB0103				
Hexachlorocyclopentadiene	ug/kg	-	-	< 700	-				
Hexachloroethane	ug/kg	-	-	< 100	-				
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	< 300	-				
Isophorone	ug/kg	-	-	12200	-				
Naphthalene	ug/kg	-	-	< 100	-				
Nitrobenzene	ug/kg	-	-	< 136	-				
N-Nitrosodimethylamine	ug/kg	-	-	< 700	-				
N-Nitrosodi-n-propylamine	ug/kg	-	-	< 714	-				
N-Nitrosodiphenylamine	ug/kg	-	-	< 100	-				
Phenanthrene	ug/kg	-	-	< 400	-				
Pyrene	ug/kg	-	-	< 100	-				
1,2,4-Trichlorobenzene	ug/kg	-	-	< 100	-				
Metals Analysis Data									
Antimony	ug/kg	-	-	< 6500	-				
Arsenic	ug/kg	-	-	1200	-				
Beryllium	ug/kg	-	-	300	-				
Cadmium	ug/kg	-	-	< 430	-				
Chromium	ug/kg	-	-	9000	-				
Copper	ug/kg	-	-	8000	-				
Lead	ug/kg	-	-	7200	-				
Mercury	ug/kg	-	-	57	-				
Nickel	ug/kg	-	-	7800	-				
Selenium	ug/kg	-	-	< 540	-				
Silver	ug/kg	-	-	< 1100	-				
Thallium	ug/kg	-	-	< 1100	-				
Zinc	ug/kg	-	-	50000	-				
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	< 52.7	-				
Aroclor 1254	ug/kg	-	-	< 105	-				
Aroclor 1260	ug/kg	-	-	< 105	-				
Aroclor 1248	ug/kg	-	-	< 52.7	-				
Aroclor 1232	ug/kg	-	-	< 52.7	-				
Aroclor 1221	ug/kg	-	-	< 52.7	-				

- Parameter not detected - Parameter not tested

932520097

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The Stanley Works

New Britain, Connecticut

**Remedial Action Report for
the Stanley Tools Facility
Newark, New Jersey**

ENSR Consulting and Engineering

July 1995

Document Number 6303-056-60R

932520098

conditions suitable for proper engineering applications. Final capping of the eastern parcel was completed on April 26, 1995.

4.1.2 Soil Investigations

In general, soil contamination at the Stanley site mainly consists of heavy metals, particularly lead as well as arsenic and zinc, and total petroleum hydrocarbons (TPHCs). Phase III investigations determined that site surface soils at various AECs are also contaminated with polycyclic aromatic hydrocarbons (PAH) compounds. Additionally, a small concentrated area of soil on the east parcel was found to contain elevated concentrations of volatiles, particularly tetrachloroethene, trichloroethene, and cis-1,2 dichloroethene. The VOC contaminated soils were addressed by excavation and off-site disposal. The remaining contaminated soils were addressed by partial excavation, formulation of a cold batch asphalt mix using contaminated soils, and placement of an impervious cap using cold batch asphalt processing and a hot mix top coat. A summary of key analytical results of soil sampling locations and results are included in Appendices A and B. Appendix A includes tables depicting a summary of ENVIRON soil sampling locations, depths, parameters and analytical results. Appendix B includes summary tables of ENSR soil sample locations, depths, parameters and analytical results.

ENSR submitted a Petition for Variance from the Technical Requirements for remediation delineation and post-remediation sampling for the Stanley Tools site on February 14, 1994, which was approved on June 21, 1994. On behalf of Stanley Tools, ENSR proposed to use existing soil data, historical groundwater data, and data from samples subsequently proposed to the NJDEP to fully characterize the subject site. The site specific conditions and technical basis for the variance are the following:

- Historic fill material has been documented at the Stanley site as well as the surrounding area, including two ISRA sites within one mile of the Stanley property. Fill material covers nearly the entire Stanley site, varying in depth from about 2 to 10 feet. Based upon available information, this historic fill material is believed to contain contaminants (including, but not limited to, priority pollutant metals, PAHs, and polychlorinated biphenyls (PCBs). The nature of fill material is such that sporadic areas of contamination and hot spots make delineation of areas specifically impacted by site operations difficult, if not impossible.
- The entire site was being remediated by capping. Since Stanley Tools remediated the entire site, the further delineation of individual AECs was not necessary.

TABLE 5-8

OFFSITE DISPOSAL OF HAZARDOUS MATERIALS
Stanley Tools - Newark, New Jersey

MATERIAL	MANIFEST NUMBER	DATE SHIPPED OFFSITE	QTY & TYPE
PCB Transformer Oil	NJA 1183397	12/14/93	1 TP
Transformer Mineral Oil	NJA 1871728	4/14/94	3 DM
Bird Excrement			11 DM
Bird Excrement			4 CF
Oil Stained Wood Blocks			NJA 1850441
VOC Contaminated Water	NJA 1850574	6/28/94	1 DM
No. 2 Fuel Oil			1 DM
Oil and Water Mixture	NJA 1850444	2/22/94	1 TT
Purge Water (VOC Contaminated)	NJA 1850443	2/10/94	2 DM
Soil			49 DM
Purge Water (VOC Contaminated)	NJA 2022240	3/24/95	6 DM
No. 2 Fuel Oil			4 DM
<div>Notes: <u>Container Types</u></div> <div>DM Metal drums, barrels, kegs</div> <div>CF Fiber or plastic boxes, cartons, cases</div> <div>CM Metal boxes, cartons, cases (including rollofs)</div> <div>TT Cargo Tanks (Tank trucks)</div> <div>TP Tanks portable</div>			

TABLE 6
Summary of Soil Results for AEC 3

ENVIRON SAMPLE ID	447A-0302-01	447A-0302-02	447A-0302-03	447A-0302-04	447H-TP02-GS01	447H-TP02-GS02
MATRIX	SOIL	SOIL	SOIL	SOIL	Soil	Soil
COLLECTION METHOD	HSAB	HSAB	HSAB	HSAB	Scoop	Scoop
DEPTH (feet)	0.0-0.5	4.0-4.5	6.5-7.5	9.5-10.0	0.0-0.5	10.5-11.0
COLLECTION DATE	10/14/86	10/14/86	10/14/86	10/14/86	1/15/90	1/15/90
COMMENTS						
Priority Pollutant Metals						
Antimony					25.00	12.00
Arsenic					4.30	0.78
Beryllium					0.10	ND
Cadmium	28.70	17.50	1.61	1.62	0.80	ND
Chromium	135.00	55.90	3.75	7.24	20.00	3.80
Copper					65.00	9.60
Lead	27740.00	2810.00	3.36	9.16	1700.00	3.00
Mercury					0.57	0.08
Nickel					36.00	9.70
Selenium					ND	ND
Silver					0.40	ND
Thallium					5.00	1.50
Zinc					220.00	26.00
Petroleum Hydrocarbons	6110.00	1160.00	57800.00	35800.00	377.00	ND
Furans						
Hepta-CDD	ND	ND	ND	ND		
Octa-CDD	ND	ND	ND	ND		
PCBs						
Aroclor 1254	ND	ND	ND	ND		
Aroclor 1260	10.00-J	0.90-J	2.90	1.30		

TABLE 17
Summary of Soil Results For AEC 14

ENVIRON SAMPLE ID	447A-1401-01	447A-1401-02	447A-1401-03	447I-1402-SB01	447I-1402-SB02
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL
COLLECTION METHOD	HSAB	HSAB	HSAB	HAB	HAB
DEPTH (feet)	0.0-1.0	10.0-11.0	10.0-11.0	0.5-1.0	2.0-2.5
COLLECTION DATE	10/20/86	10/20/86	10/20/86	01/06/92	01/06/92
COMMENTS				AROMATIC	AROMATIC
Priority Pollutant Metals					
Cadmium	20.50	1.33			3.30
Chromium	102.00	11.80			16.00
Lead	1101.00	8.36			52.00
Petroleum Hydrocarbons	6250.00	ND			ND
PCBs					
Aroclor 1254				39.40	
Aroclor 1260				ND	
Carcinogenic PAHs					
Benzo(a)anthracene				1.54	
Benzo(a)pyrene				0.85	
Benzo(b)fluoranthene				1.26	
Benzo(k)fluoranthene				ND	
Chrysene				1.90	
Dibenzo(a,h)anthracene				ND	
Indeno(1,2,3-cd)pyrene				0.58	
Total Carcinogenic PAHs				6.13	
Base Neutral Compounds					
1,2-Dichlorobenzene				ND	
1,3-Dichlorobenzene				ND	
1,4-Dichlorobenzene				ND	
Acenaphthene				0.28	
Acenaphthylene				ND	
Anthracene				0.43	

TABLE 31
Summary of Results for AEC 28

ENVIRON SAMPLE ID	447A-2801-01
MATRIX	WOOD BLOCK
COLLECTION METHOD	CHIP
DEPTH (feet)	NA
COLLECTION DATE	10/86
COMMENTS	

PCBs

Aroclor 1254 1.80

TABLE 30
Summary of Results for AEC 27

ENVIRON SAMPLE ID	447A-2701-01	447A-2702-01	447A-2703-01
MATRIX	WOOD BLOCK	WOOD BLOCK	WOOD BLOCK
COLLECTION METHOD	CHIP	CHIP	CHIP
DEPTH (feet)	NA	NA	NA
COLLECTION DATE	10/86	10/86	10/86
COMMENTS			

PCBs
Aroclor 1254 1.30

932520104

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

 DATE: 09/28/93
 PAGE: 3

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	02-04471	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Parameters Units		Sample Points, Sampling Dates, and ETC Sample No.'s							
		WT01-SB01 930826 DB0100	WT01-SB01 930826 DB0100	WT03-SB01 930826 DB0102	WT04-SB01 930826 DB0103				
Hexachlorocyclopentadiene	ug/kg	-	-	< 700	-				
Hexachloroethane	ug/kg	-	-	< 100	-				
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	< 300	-				
Isophorone	ug/kg	-	-	12200	-				
Naphthalene	ug/kg	-	-	< 100	-				
Nitrobenzene	ug/kg	-	-	< 136	-				
N-Nitrosodimethylamine	ug/kg	-	-	< 700	-				
N-Nitrosodi-n-propylamine	ug/kg	-	-	< 714	-				
N-Nitrosodiphenylamine	ug/kg	-	-	< 100	-				
Phenanthrene	ug/kg	-	-	< 400	-				
Pyrene	ug/kg	-	-	< 100	-				
1,2,4-Trichlorobenzene	ug/kg	-	-	< 100	-				
Metals Analysis Data									
Antimony	ug/kg	-	-	< 6500	-				
Arsenic	ug/kg	-	-	1200	-				
Beryllium	ug/kg	-	-	300	-				
Cadmium	ug/kg	-	-	< 430	-				
Chromium	ug/kg	-	-	9000	-				
Copper	ug/kg	-	-	8000	-				
Lead	ug/kg	-	-	7200	-				
Mercury	ug/kg	-	-	57	-				
Nickel	ug/kg	-	-	7800	-				
Selenium	ug/kg	-	-	< 540	-				
Silver	ug/kg	-	-	< 1100	-				
Thallium	ug/kg	-	-	< 1100	-				
Zinc	ug/kg	-	-	50000	-				
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	< 52.7	-				
Aroclor 1254	ug/kg	-	-	< 105	-				
Aroclor 1260	ug/kg	-	-	< 105	-				
Aroclor 1248	ug/kg	-	-	< 52.7	-				
Aroclor 1232	ug/kg	-	-	< 52.7	-				
Aroclor 1221	ug/kg	-	-	< 52.7	-				

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=-Parameter not tested

932520105

TABLE B-3 (Cont'd)

Summary of Sump Structure and Clay Pipe Soil Sampling Results
ENSR Delineation/Post-Remedial/Preliminary Assessment Soil Samples Summer/Fall 1994
Stanley Tools - Newark, New Jersey

Field Sample No.		SP-1	SP-2S	SP-3N	SP-4N	SP-5	SP-5D	SP-6	NJDEP Soil Cleanup Criteria (ppm) April 1994 Impact to G.W.
		Inside Sump	0-6" (Below Sump Base)	0-6" (Below Sump Base)	0-6" (Below Sump Base)	0-6" (Below Invert)	0-6" (Below Invert)	0-6" (Below Gravel)	
		Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Laboratory Sample No.		98642	99034	99035	99036	99155	99156	99157	
Compound (ppm)	Sample Date	6/16/94	6/23/94	6/22/94	6/23/94	6/27/94	6/27/94	6/27/94	
Nickel		94.3 (1.9)	NA	NA	NA	NA	NA	NA	†
Selenium		28.6 (1.4)S	NA	NA	NA	NA	NA	NA	†
Silver		2.9 (0.66)	NA	NA	NA	NA	NA	NA	†
Zinc		1900 (20.6)	NA	NA	NA	NA	NA	NA	†
Total Petroleum Hydrocarbons		2020 (25)	15,000 (25)	ND (25)	NA	ND (25)	ND (25)	545 (25)	10,000
Petroleum Hydrocarbons		4970 (25)**	NA	NA	NA	NA	NA	NA	10,000
Total PCBs		ND	ND (0.092)	ND (0.095)	ND (0.095)	ND (0.96)	ND (0.94)	0.310*	50

932520106



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management

Manifest Section
ON 026, Trenton, NJ 08626

or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved: OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No. NJD000245404910
Manifest
Document No. 2111010

2. Page 1
of 2

Information in the shaded areas
is not required by Federal
law.

3. Generator's Name and Mailing Address

Stanley Tools
140 Chapel Street
Newark NJ 07105

A. State Manifest Document Number

NJA 1183397

B. State Generator's ID

Same -

4. Generator's Phone (908) 560-7323

5. Transporter 1 Company Name

6. US EPA ID Number

Dart Trucking Company, Inc.

01H1D101019181615181215

C. State Trans. ID

NJ 5-1817916

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (216) 533-9841

E. State Trans. ID

9. Designated Facility Name and Site Address

10. US EPA ID Number

ENSR Operations
1501 Raff Road SW
Canton OH 44710

01H1D101019181615181215

F. Transporter's Phone (800) 541-7558

G. State Facility's ID

H. Facility's Phone (216) 477-3474

11. US DOT Description
HM

Under Shipping Name, Hazard Class, and ID Number)

12. Containers

13. Total

Quantity

14. Unit

Wt/Vol

15. Waste No.

a. RQ, Designated Biphenyls, 9, UN2315, PG III

001TP00010101 X171513

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

a. Transformer

c.

a.

c.

b.

d.

b.

d.

15. Special Handling Instructions and Additional Information

Job #4542

24 HOUR EMERGENCY RESPONSE: (216) 452-0837

See attached continuation form for ENSR item #'s, storage dates, pcb/ppm and weights.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and used the best waste management method that is available to me and that I can afford.

Printed/Typed Name:

RAYMOND PAYNE

Signature

Raymond Payne

Month Day Year

11/21/93

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Charles M Chambers

Signature

Charles M Chambers

Month Day Year

11/21/93

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

932520107



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OCT 24 10 13 AM '94

177

ENSR Consulting
and Engineering

Somerset Executive Square 1
One Executive Drive
Somerset, NJ 08873
(908) 560-7323
FAX (908) 560-1688

October 25, 1994

VIA AIRBORNE EXPRESS

Mr. Joseph Ludovico
New Jersey Department of Environmental Protection
Division of Responsible Party Site Remediation
CN 028, 401 East State Street
Trenton, New Jersey 08625-0028

Rec. 10/24/94
Ref. 10/31/94

Re: Clay Pipeline
Former Stanley Tools Facility
140 Chapel Street, Newark, New Jersey
ISRA Case No. 85178

Dear Mr. Ludovico:

This letter provides you with a written summary of the additional Remedial Investigation/Remedial Action (RI/RA) work ENSR Consulting and Engineering (ENSR) and The Stanley Works (Stanley) have completed on the "clay pipeline" located in and around AEC 8 in the east yard at the above-referenced site. The purpose of this letter is to provide you with a written summary of the work conducted to date, and to apprise you of our plans to conduct additional Remedial Actions in this area so we can complete site capping activities as soon as possible.

We understand NJDEP has accepted and does not have any additional requirements in response to ENSR's August 26, 1994 submittal related to the work conducted by ENSR and Stanley on the "pipeline conduit". As a result this subject is not further discussed in this letter. For your ease of review, we have made this submittal a "stand alone document" which includes relevant information and data contained in our August 26, 1994 correspondence as well as more recent information not previously reported.

Additional work was performed by ENSR and Stanley during the week of October 3, 1994 in order to address concerns expressed by NJDEP during several telephone conversations in response to ENSR's August 26, 1994 correspondence. The Technical Requirements For Site Remediation (Technical Requirements), and telephone conversations between ENSR, yourself and Mr. Steve Maybury, of the NJDEP, were used as guidelines by which ENSR conducted this work. The work related to the clay pipeline included remediation of the southern end of the pipeline (exiting Building No. 20 A) and associated contaminated soil and further evaluation of levels of contaminants within the northern end of the pipeline and the soils surrounding the pipeline.

932520108

TABLE 2 (Cont'd)

**Summary of Sump Structure and Clay Pipe Soil Sampling Results - Stanley Tools
ENSR Samples Summer/Fall 1994
Newark, New Jersey**

Field Sample No.		SP-1	SP-2S	SP-3N	SP-4N	SP-5	SP-5D	SP-6	NJDEP Soil Cleanup Criteria (ppm) April 1994 Impact to G.W.
Depth		Surface	0-6" (Below Sump Base)	0-6" (Below Sump Base)	0-6" (Below Sump Base)	0-6" (Below Invert)	0-6" (Below Invert)	0-6" (Below Gravel)	
Type		Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Laboratory Sample No.		98642	99034	99035	99036	99155	99156	99157	
Compound (ppm)	Sample Date	6/16/94	6/23/94	6/22/94	6/23/94	6/27/94	6/27/94	6/27/94	
Total Petroleum Hydrocarbons		2020 (25)	<u>15,000</u> (25)	ND (25)	NA	ND (25)	ND (25)	545 (25)	10,000
Petroleum Hydrocarbons		4970 (25)**	NA	NA	NA	NA	NA	NA	10,000
Total PCBs		ND	ND (0.092)	ND (0.095)	ND (0.095)	ND (0.96)	ND (0.94)	0.310°	50

The Stanley Works

New Britain, Connecticut



Proposed Declaration of Environmental Restrictions for the Stanley Tools Facility Newark, New Jersey

ENSR Consulting and Engineering

May 1996

Document Number 6303-056(9)/DER.CVR

932520110

TABLE 6
Summary of Soil Results for AEC 3

ENVIRON SAMPLE ID	447A-0302-01	447A-0302-02	447A-0302-03	447A-0302-04	447H-TP02-GS01	447H-TP02-GS02
MATRIX	SOIL	SOIL	SOIL	SOIL	Soil	Soil
COLLECTION METHOD	HISAB	HISAB	HISAB	HISAB	Scoop	Scoop
DEPTH (feet)	0.0-0.5	4.0-4.5	6.5-7.5	9.5-10.0	0.0-0.5	10.5-11.0
COLLECTION DATE	10/14/86	10/14/86	10/14/86	10/14/86	1/15/90	1/15/90
COMMENTS						
Priority Pollutant Metals						
Antimony					25.00	12.00
Arsenic					4.30	0.78
Beryllium					0.10	ND
Cadmium	28.70	17.50	1.61	1.62	0.80	ND
Chromium	135.00	55.90	3.75	7.24	20.00	3.80
Copper					65.00	9.60
Lead	27740.00	2810.00	3.36	9.16	1700.00	3.00
Mercury					0.57	0.08
Nickel					36.00	9.70
Selenium					ND	ND
Silver					0.40	ND
Thallium					5.00	1.50
Zinc					220.00	26.00
Petroleum Hydrocarbons	6110.00	1160.00	57800.00	35800.00	377.00	ND
Furans						
Hepta-CDD	ND	ND	ND	ND		
Octa-CDD	ND	ND	ND	ND		
PCBs						
Aroclor 1254	ND	ND	ND	ND		
Aroclor 1260	10.00-J	0.90-J	2.90	1.30		

932520111

TABLE 30
Summary of Results for AEC 27

ENVIRON SAMPLE ID	447A-2701-01	447A-2702-01	447A-2703-01
MATRIX	WOOD BLOCK	WOOD BLOCK	WOOD BLOCK
COLLECTION METHOD	CHIP	CHIP	CHIP
DEPTH (feet)	NA	NA	NA
COLLECTION DATE	10/86	10/86	10/86
COMMENTS			

PCBs
Aroclor-1254 1.30

932520112

ETC

DATA MANAGEMENT SUMMARY REPORT (DM-OC) - All Parameters Tested, Selected Samples

 DATE: 09/28/93
 PAGE: 3

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	ENVIRON CORPORATION	02-04471	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Parameters		Sample Points, Sampling Dates, and ETC Sample No.'s							
		WT01-SB01 930826 DB0100	WT01-SB01 930826 DB0100	WT03-SB01 930826 DB0102	WT04-SB01 930826 DB0103				
	Units								
Hexachlorocyclopentadiene	ug/kg	-	-	< 700	-				
Hexachloroethane	ug/kg	-	-	< 100	-				
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	< 300	-				
Isophorone	ug/kg	-	-	12200	-				
Naphthalene	ug/kg	-	-	< 100	-				
Nitrobenzene	ug/kg	-	-	< 136	-				
N-Nitrosodimethylamine	ug/kg	-	-	< 700	-				
N-Nitrosodi-n-propylamine	ug/kg	-	-	< 714	-				
N-Nitrosodiphenylamine	ug/kg	-	-	< 100	-				
Phenanthrene	ug/kg	-	-	< 400	-				
Pyrene	ug/kg	-	-	< 100	-				
1,2,4-Trichlorobenzene	ug/kg	-	-	< 100	-				
Metals Analysis Data									
Antimony	ug/kg	-	-	< 6500	-				
Arsenic	ug/kg	-	-	1200	-				
Beryllium	ug/kg	-	-	300	-				
Cadmium	ug/kg	-	-	< 430	-				
Chromium	ug/kg	-	-	9000	-				
Copper	ug/kg	-	-	8000	-				
Lead	ug/kg	-	-	7200	-				
Mercury	ug/kg	-	-	57	-				
Nickel	ug/kg	-	-	7800	-				
Selenium	ug/kg	-	-	< 540	-				
Silver	ug/kg	-	-	< 1100	-				
Thallium	ug/kg	-	-	< 1100	-				
Zinc	ug/kg	-	-	50000	-				
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	< 52.7	-				
Aroclor 1254	ug/kg	-	-	< 105	-				
Aroclor 1260	ug/kg	-	-	< 105	-				
Aroclor 1248	ug/kg	-	-	< 52.7	-				
Aroclor 1232	ug/kg	-	-	< 52.7	-				
Aroclor 1221	ug/kg	-	-	< 52.7	-				

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

932520113

ETC

DATA MANAGEMENT SUMMARY REPORT **(DM-OC) - All Parameters Tested, Selected Samples**

DATE: 09/28/94
 PAGE: 4

Chain of Custody Data Required for ETO Data Management Summary Report

See Below ETO Sample No.	ENVIRON CORPORATION Company	02-04471 Facility
	Date Below Sample Point	Date

Parameters	Units	Sample Points, Sampling Dates, and ETO Sample No.'s							
		WT01-SB01 930826 DBD100	WT01-SB01 930826 DBD100	WT03-SB01 930826 DBD102	WT04-SB01 930826 DBD103				
Aroclor 1248	ug/kg			52.7					
Miscellaneous Parameters	(ppm)								
Petroleum Hydrocarbons (IR)	mg/kg	29.9	29.9	54.8	20.4	10,000		10,000	
Petroleum Hydrocarbons (IR)	mg/kg	29.9	29.9	-	-				

Footnotes: DBDL-Below Method Detect Ion Limit ND-Parameter not detected - Parameter not tested

932520114

24.4

TABLE B-3

SOIL SAMPLE RESULTS - AEC-1, AEC-12, AEC-14,
AEC-16, AEC-17/25/39, AND AEC-22/35
ENSR SAMPLES OCTOBER 1993
STANLEY TOOLS - NEWARK, NEW JERSEY

Field Sample No:	AEC-1C	AEC-12B	AEC-14C	*AEC-48C	**AEC-48C	AEC-16C
Laboratory Sample I.D. No.:	A84315-3	A84315-24	A84315-7	A84315-22	A84315-22	A84315-10
Sample Date:	10-19-93	10-19-93	10-19-93	10-10-93	10-19-93	10-19-93
Depth:	7.0-7.5	5.5-6.5	6.0-8.0	6.0-8.0	6.0-8.0	5.5-7.5
Analyte Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Di-n-butyl phthalate	J (0.078)	J (0.11)	J (0.200)	J (0.110)	J (0.110)	
Bis (2-ethylhexyl) phthalate	ND	J (0.09)	J (0.160)	J (0.170)	J (0.170)	J (0.42)
Phenanthrene	ND	ND	J (0.150)	J (0.160)	J (0.160)	31
Fluoranthene	ND	J (0.072)	J (0.160)	J (0.190)	J (0.190)	32
Pyrene	ND	J (0.063)	J (0.110)	J (0.130)	J (0.130)	30
Benzo (a) anthracene	ND	ND	J (0.062)	J (0.070)	J (0.070)	14
Chrysene	ND	ND	J (0.064)	J (0.072)	J (0.072)	14
Benzo (b) fluoranthene	ND	ND	J (0.060)	J (0.052)	J (0.052)	16
Benzo (k) fluoranthene	ND	ND	J (0.054)	J (0.065)	J (0.065)	11
Benzo (a) pyrene	ND	ND	J (0.069)	J (0.066)	J (0.066)	18
Fluorene	ND	ND	ND	ND	ND	ND
Benzo (g, h, i) perylene	ND	ND	ND	ND	ND	12
Dibenzo (a, h) anthracene	ND	ND	ND	ND	ND	3.3
Butylbenzyl phthalate	ND	J (0.043)	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	J (2.9)
Acenaphthene	ND	ND	ND	ND	ND	J (3.2)
Anthracene	ND	ND	ND	ND	ND	7.4
Indeno (1, 2, 3-cd) pyrene	ND	ND	ND	ND	ND	12
Aroclor-1254 (PCB)	NT	NT	J (0.310)	NT	J (0.250)	NT

Notes: SCC - NJDEP Soil Cleanup Criteria.
 NSCC - No Soil Cleanup Criteria for particular analyte.
 J - Below detection limit - estimated concentration based on mass spectral data.
 All analytes not shown were below detection limits for sample in question.
 ND - Not detected
 * - AEC-48C is duplicate of AEC-14C.
 ** - Analyses was repeated with lower detection limits.
 NT - Not analyzed

Sample depths shown in feet unless otherwise specified.

All sample results and SCC shown in parts per million (ppm).

All semi-volatile organic base neutrals not shown were below detection limits for the sample in question.

Detection limits are shown in parenthesis.

932520115

TABLE B-8 (Cont'd)

Summary of Sump Structure and Clay Pipe Soil Sampling Results
 ENSR Delineation/Post-Remedial/Preliminary Assessment Soil Samples Summer/Fall 1994
 Stanley Tools - Newark, New Jersey

Field Sample No.		SP-1	SP-2S	SP-3N	SP-4N	SP-5	SP-5D	SP-6	NJDEP Soil Cleanup Criteria (ppm) April 1994 Impact to G.V.
		Inside Sump	0-6" (Below Sump Base)	0-6" (Below Sump Base)	0-6" (Below Sump Base)	0-6" (Below Invert)	0-6" (Below Invert)	0-6" (Below Gravel)	
		Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Laboratory Sample No.		98642	99034	99035	99036	99155	99156	99157	
Compound (ppm)	Sample Date	6/16/94	6/23/94	6/22/94	6/23/94	6/27/94	6/27/94	6/27/94	
Nickel		94.3 (1.9)	NA	NA	NA	NA	NA	NA	†
Selenium		28.6 (1.4)S	NA	NA	NA	NA	NA	NA	†
Silver		2.9 (0.66)	NA	NA	NA	NA	NA	NA	†
Zinc		1900 (20.6)	NA	NA	NA	NA	NA	NA	†
Total Petroleum Hydrocarbons		2020 (25)	15,000 (25)	ND (25)	NA	ND (25)	ND (25)	545 (25)	10,000
Petroleum Hydrocarbons		4970 (25)**	NA	NA	NA	NA	NA	NA	10,000
Total-PCBs		ND	ND (0.092)	ND (0.095)	ND (0.095)	ND (0.96)	ND (0.94)	0.310°	50

932520116

Federal Pacific Electric Company

932520118

932520119

C.	NO.	NAME OF PRODUCT/CUSTOMER	POUNDS	IN THOUSANDS OF POUNDS AND CENTS		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUM. TO DATE
				LAST YEAR	THIS YEAR													
		INTERTECH 70-30																10511-210
		LESSER ELEC EAG DENSEVILLE IL		14.8														0029998
		FEDERAL PAC ELEC NEWARK NJ		.360														1002752
		FEDERAL PACIFIC EL MILPITAS CA			4.04		4.04											0015338
		PARENT CUST. TOT-FED PAC ELEC NE		.360	4.04		4.04											1002752
		JOHN ELECTRIC SACRAMENTO CA		1.35														1003145
		JOHN ELEC SUPPLY NEW BEDFORD MA			2.70												2.70	0033824
		PARENT CUST. TOT-JOHN ELEC SCHAEF		1.35	2.70												2.70	1059947
		GLENN CO PACHEGO CA			12.1		1.3		10.8									0032040
		HAZELTINE CORP GREENLAWN CT NY																0028722
		HELLNA CORP HELENA AL		75.5	130			27.0					20.2	14.8		37.7	30.3	0030875
		HEVI-DUTY ELEC WOODBURY NC	200	364	368	53.3	27.0	50.2		33.3	29.2	29.7		23.6	32.0	30.5	52.8	0008796
		ITE IMPERIAL HANGCOKS BRDG NJ		.720														0025464
		ITE CIRCUIT BREAKER PHIL PA		.620		1.35										1.35		1004205
		PARENT CUST. TOT-ITE CIRCUIT BRE		.621	1.35											1.35		1004205
		ITE IMPERIAL OKLAHOMA CITY OK		2.70	2.78	2.70												0030314
		ITE IMPERIAL LOS ANGELES CA		1.44														0030111
		ITE IMPERIAL JACKSONVILLE FL		3.60														0030013
		ITE IMPERIAL HONOLULU HAWAII		1.40														0029616
		ITE IMPERIAL HONOLULU IL		.360														0030031
		ITE IMPERIAL BOSTON MA		.360														0029612
		ITE IMPERIAL CUNY TRENTON NJ			3.37				1.37									0032336
		ITE IMPERIAL STATION ISL NY			1.35											1.35		0033682
		ITE IMPERIAL TORONTO ONT			.674				.674									0025402
		ITE IMPERIAL DEER PARK TX		4.72														0030566
		PARENT CUST. TOT-ITE CIRCUIT BRE		12.3	5.39				.67	3.37							1.35	1004205
		ITE IMPERIAL SPARTANBURG SC		1.08	3.37				3.37									0030317
		KAUFMAN ELECTRIC ONE APTOS HI			2.70	2.70												0011734
		KAUFMAN ELEC CRYSTAL SPR MS	420	420	271	30.8	77.2		39.9	36.6		39.9						

Prentiss Drug & Chemical

FEASIBILITY STUDY REPORT

Albert Steel Drum/Prentiss Drug and Chemical Site
Newark, New Jersey

Submitted To:

New Jersey Department of Environmental Protection and Energy

Prepared By:

TRC Environmental Corporation

October, 1992



TRC Environmental Corporation

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932520122

Inorganic contaminant levels were compared to background levels. Inorganics were detected at elevated levels throughout the site in unfiltered ground water samples.

The ground water flow direction is generally from south to north within each of the aquifer zones. Deep and bedrock ground water quality upgradient of the site is currently undefined, and upgradient shallow ground water contamination may be contributing to contaminant levels detected on-site.

- Three areas of on-site surface water were sampled. These include a concrete-lined drainage channel in the south-central portion of the site, a small pond near the steel grate/foundation in the central portion of the site, and an area of intermittent standing water in the southern portion of the site. Surface water quality was compared to New Jersey surface water quality standards. Chlorinated volatile organic compounds, benzene, bis(2-ethylhexyl)-phthalate, pesticides, PCBs, and inorganics were detected in surface water samples at levels exceeding surface water quality standards.
- Sediments were sampled from the same three general areas where the surface water samples were collected. Sediment quality was compared to EPA criteria specified in the NJDEPE Draft Guidance for Sediment Evaluation (March 1991). Polynuclear aromatic hydrocarbons (a subset of SVOCs), pesticides, PCBs and inorganics were detected at levels exceeding the draft guidance levels. No contaminant-specific volatile organic guidance levels exist, but one sediment sample contained total VOCs at a level exceeding 1,000 ppm, the proposed soil cleanup standard.
- PDC building interior samples were compared to proposed New Jersey building interior surface cleanup standards. PCBs were detected in one brick (chip) sample at a level exceeding the proposed standard. Asbestos-containing materials were also identified within the building.

Underground storage tank contents and powder piles were also sampled. Three tanks have been identified on-site and the locations of two suspected underground storage tanks have been noted. A powder pile near the former PDC building was identified and sampled. Also, thirteen overpacked drums remain on-site from remedial investigation activities.

VOC concentrations in surface soils were evaluated in three ways. First, individual VOC results were compared to NJDEPE non-residential surface soil cleanup standards (NJDEPE, 1992). No surface soil samples exceeded the individual VOC limits specified. Secondly, total VOC values were tabulated and compared to a 1,000 ppm organic compound limit. As noted above, no samples indicated in excess of 971 ppm VOCs. Therefore, no surface soil samples exceed this standard. Thirdly, total organic values, including VOCs, SVOCs, TICs, and Pesticides/PCBs, were tabulated and compared to a 10,000 ppm total organic compound standard. No surface soil samples exceeded this criteria.

Semi-Volatile Organic Compounds

During Phase I and II investigations, laboratory analysis identified SVOCs in most surface soil samples over the entire site. Phase II investigations indicated the most predominant SVOCs detected were PAHs and phthalate esters. Other SVOCs detected on-site at lower frequencies and concentrations included phenols, benzoic acid, and dibenzofuran.

In general, the highest concentrations of PAHs and caPAHs were reported in the vicinity of the former PDC building. Concentrations of SVOCs in surface soil samples were evaluated in three ways. First, individual SVOC results were compared to NJDEPE non-residential surface soil cleanup standards. Numerous surface soil samples exceeded the individual SVOC limits. Samples which exceeded standards were distributed over the entire site. Each SVOC which exceeded standards was a carcinogenic PAH (caPAH). Secondly, individual SVOCs were compared to a 1,000 ppm organic compound limit. No samples exceeded this limit. Thirdly, total organic compound values were tabulated and compared to a 10,000 ppm limit. No samples exceeded this value. The highest total organic value for a surface soil sample was 1,341 ppm at boring B-52.

Pesticides/PCBs

PCBs detected in surface soil samples included Aroclors 1242, 1248, 1254, and 1260. Aroclor-1254 occurred with the highest frequency in the surface soil samples, having been detected in twelve of the fourteen samples in which PCBs were found. The other Aroclors were detected in only one or two samples. The highest total PCB concentration (24 ppm) was

Semi-Volatile Organic Compounds

Soil samples collected from test pits and mini-test pits during Phase I and Phase II field explorations were analyzed for SVOCs. The results of Phase II sampling indicate that generally low levels of SVOCs were present in subsurface soil on-site. As shown in the Phase I report, low to high levels of SVOCs were also detected in the test pit and mini-test pit samples. As previously noted, only the soil sample from TP-4C exceeded the total organic compound standard of 10,000 ppm.

Pesticides/PCBs

To assess potential areas of elevated pesticide/PCB contamination in the test pits, total pesticide concentrations over 100 ppm and total PCB concentrations over 10 ppm in the samples were tabulated. Total pesticide concentrations did not exceed 100 ppm at any location tested. However, three locations existed where total PCB concentrations exceeded 10 ppm. These locations (TP-3/16.4 ppm, TP-4N/12 ppm, and TP-5S/28 ppm) occur in the central portion of the site along the large trash and fill pile.

Inorganics

Three test pit samples were analyzed for inorganic analytes during the RI. Concentrations of inorganic analytes detected in these samples were compared to both typical New Jersey and U.S. soil background values. This approach was used since non-fill based background soil locations were not identified on-site. Based on this evaluation elevated concentrations of antimony (308 ppm), arsenic (18.9 ppm), cadmium (59 ppm), copper (560 ppm), lead (2,820 ppm), mercury (15 ppm), silver (2.4 ppm), and zinc (606 ppm) concentrations were detected. Individual inorganic analytes were detected in the following locations; antimony (TP-4C), arsenic (TP-7), cadmium (TP-4C), copper (TP-7), lead (TP-4C), mercury (TP-5C, TP-7), silver (TP-7), and zinc (TP-4C, TP-7). These test pits were located in the southern and eastern portions of the site.

Semi-Volatile Organic Compounds

As with surface soil samples most subsurface samples contained detectable concentrations of SVOCs. PAHs and phthalate esters were the most prevalent class of SVOCs detected. In general, the highest concentration of SVOCs were detected in the southern portion of the site. Samples within this area exhibited concentrations of PAHs up to 317 ppm (B62-1) and carcinogenic PAHs (capahs) up to 139 ppm (B35-2). Total phthalates up to 546 ppm (B26-2) were detected in the northern and central portions of the site.

Pesticides/PCBs

Pesticides and PCBs were detected in many subsurface borings at the ASD/PDC site. Pesticides were detected in 56 out of 96 samples and PCBs were detected in 16 out of 71 samples. In each case where data exists, concentrations of pesticides and PCBs decreased with depth. The highest total concentration of pesticides detected (514 ppm) was at boring B7-5 at the northeast corner of the former PDC building. The highest individual subsurface soil pesticide level of 310 ppm of 4,4'-DDT was also detected in this same boring. No other sample locations indicated greater than 100 ppm total pesticides. The highest individual PCB concentration (40 ppm) was reported at boring M13I-2. No other soil samples indicated greater than 10 ppm total PCBs.

Inorganics

Inorganic analytes were detected in each of the subsurface soil samples analyzed. Elevated concentrations of seven metals; antimony, arsenic, copper, lead, manganese, mercury, and zinc were detected in subsurface soils based on a comparison of site concentrations to typical background levels. Metal concentrations were considered to be elevated if concentrations were at least two orders of magnitude greater than background concentrations. A brief summary of each of the seven metals is provided below.

- Antimony was detected at greater than 100 ppm (139 ppm) in one soil boring north of the former PDC building (B64-2).

Pesticides/PCBs

Shallow Wells:

Of 16 shallow ground water samples analyzed for pesticides/PCBs in the Phase II RI only four samples indicated the presence of pesticides, and one sample indicated the presence of PCBs (Arochlor 1242 at 3.3 ppb in MW-13S). Pesticides detected included heptachlor epoxide, dieldrin, and alpha and gamma-chlordane. Only one well indicated the presence of pesticides during the Phase I investigation (MW-5S - 6.4 ppb chlordane).

None of the concentrations of pesticides and PCBs in the shallow well samples exceeded the individual organic cleanup standard of 1 ppm. The results seem to indicate that the levels of pesticides and PCBs are generally higher in the southern portion of the site as well as off-site to the south.

Intermediate Wells:

Of the nine intermediate level wells analyzed for pesticides/PCBs during the Phase II RI only two wells indicated the presence of these compounds. Monitoring wells MW-5I and MW-8I indicated less than one ppb of pesticides each, while MW-13S indicated less than 1 ppb of PCBs.

None of the pesticides/PCBs contaminants detected in the Phase II RI exceeded the 1 ppm individual organic cleanup level.

Deep Wells and Bedrock Well:

No pesticides or PCBs were detected in the three deep wells or the bedrock well.

Inorganics

Shallow Wells:

The results of the Phase II inorganic compound analysis indicated that inorganic contamination is present over much of the site, with the ground water in the southern portion of the site being impacted the most. The following is a brief summary of inorganics results detected in ground water at a concentration greater than 1 ppm.

1.5.5 Surface Water

Volatile Organic Compounds

The levels of VOCs detected in the surface water samples from both Phase I and II investigations were compared to the NJDEPE surface water quality criteria for FW-2, non-trout surface water. The criteria limits for the following VOCs were exceeded by Phase I or Phase II samples: vinyl chloride (two samples), 1,2,-dichloroethane (one sample), carbon tetrachloride (one sample), trichloroethene (three samples), benzene (four samples), and tetrachloroethane (three samples). The samples that appeared to be the most heavily impacted by VOCs were SW-1 from Phase I, located near the two small foundations, and SW-9 from Phase II, located on the southern border of the site in the drainage canal.

Semi-Volatile Organic Compounds

The Phase I surface water sampling results and those from Phase II were compared to NJDEPE surface water quality criteria. Based on this comparison, only the concentrations of bis(2-ethylhexyl)phthalate appeared elevated. Elevated concentrations were reported in the drainage channel and on-site pond.

Pesticides/PCBs

During Phase I laboratory analysis, only one surface water sample exhibited the presence of pesticides. No PCBs were identified during the Phase I laboratory analysis. Three of five Phase II surface water samples contained detectable levels of pesticides and all five of the samples contained detectable levels of PCBs. Three pesticides, dieldrin, alpha-chlordane, and gamma-chlordane, were detected at measurable levels in Phase II samples. Dieldrin was the only pesticide found in samples SW14 and SW15 (located south and off-site). All three pesticides were detected in sample SW7, located in the small pond on-site.

Both Phase I and II surface water sample results were compared to surface water quality criteria for the three pesticides for which criteria exists; beta-BHC, dieldrin, and chlordane (total). One Phase I sample, SW-3, exceeded the beta-BHC criteria; three Phase II samples, SW-7, SW-14, and SW-15, exceeded the dieldrin criteria; and one Phase II sample, SW-7

exceed the 1,000 ppm total VOC standard. Both of these samples are located off-site on the Welch, Holme, & Clark property. Of the on-site sediment samples from Phase I and II, only sample SD-1 from Phase I, located to the east of the two small foundations, exceeded a total VOC concentration of 1,000 ppm with a value of 8,178 ppm.

Semi-Volatile Compounds

Laboratory analysis for the Phase I and Phase II investigations, detected SVOCs in all of the sediment samples. PAHs, including carcinogenic PAHs, as well as phthalate esters were the most prevalent types of SVOCs detected in the samples.

According to sediment quality criteria which evaluate the samples based on the total organic carbon (TOC) values, only the criterion for phenanthrene was exceeded. The phenanthrene standard was exceeded in twelve samples.

The concentrations of SVOCs in the sediments were also compared to the Effects Range-Median (ER-M) values. The following PAH compounds had ER-M values that were exceeded by the concentrations found in the following number of sediment samples: acenaphthene (four samples), anthracene (eight samples), benzo(a)anthracene (seven samples), benzo(a)pyrene (five samples), chrysene (eight samples), dibenz(a,h)anthracene (three samples), fluoranthene (nine samples), 2-methylnaphthalene (eight samples), naphthalene (eight samples), phenanthrene (twelve samples), pyrene (eleven samples), and total PAHs (twelve samples).

ER-M values were exceeded for SVOC's at each of the three on-site surface water features as well as at off-site surface water features to the south of the site.

Pesticides/PCBs

Each sediment sample was analyzed for pesticides and PCBs during Phase I and Phase II investigations. During Phase I, pesticides were present in three of the five sediment samples and PCBs were detected in four of the five sediment samples.

The following pesticides were detected in sediment samples: alpha-BHC, aldrin, dieldrin, 4,4'-DDE, endrin, 4,4'-DDD, 4,4'-DDT, alpha-chlordane, and gamma chlordane. The most prevalent pesticide in the sediment samples was gamma-chlordane, occurring in nine of the fourteen samples. The highest total concentration of pesticides in a sample occurred at sample

sample contained a small amount of total VOCs (109 ppb), mostly comprised of methylene chloride and acetone, which were also detected in the field blank. Sample (P6) exhibited a concentration of total SVOCs of 123 ppb.

Brick Samples:

None of the brick samples contained any measurable amounts of dioxin. Only one (B-1) of the four brick samples contained PCBs. PCBs were detected in this brick sample at a concentration of 190 ppb. All of the four brick samples, exhibited concentrations of TPH ranging from 69 up to 8,400 ppm.

Wipe Samples:

None of the wipe samples contained any measurable amounts of dioxin. Two of the wipe samples, W7 and W10, a duplicate of were analyzed for pesticides and PCBs. No PCBs were detected, but 4,4'-DDE, 4,4'-DDT, and methoxychlor were detected at similar concentrations in both samples.

Asbestos:

Seventeen out of twenty samples collected during the Phase II investigation exhibited the presence of asbestos.

1.5.9 General Samples

Valve House:

Chloroform was detected in the single valve-house water sample at 87 ppb and bromodichloromethane was detected at 7 ppb. SVOCs were not detected in the sample, nor were PCBs. Pesticides, including 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT were present in the sample. No elevated concentrations of inorganic compounds were present in the sample.

Tank Samples:

Two solid samples (one sample, T2, and a duplicate, T3) were obtained from the inside of a tank located in the central portion of the site near the surface water channel. Both samples

contained elevated concentrations of VOCs. Sample T2 contained 87,000 ppb of toluene and 74,000 ppb of total xylenes. Elevated amounts of methylene chloride and acetone were also detected and VOC TICs were also significant in both samples (3,400,000 ppb).

Both samples contained similar, elevated amounts of the SVOCs, naphthalene (700,000 ppb in T2) and 2-methyl naphthalene (380,000 ppb in T2). Sample T2, however, also contained elevated amounts of bis(2-ethylhexyl)phthalate (520,000 ppb) and di-n-octyl phthalate (210,000 ppb). SVOC TICs were also detected at significant concentrations (208,900,000 ppb in T2). No elevated levels of metals or cyanide were noted and no detectable levels of PCBs or pesticides were detected.

Concrete Impoundment Samples:

Two soil samples (LW11 and LW12) and a duplicate sample (LW13) were obtained from a concrete impoundment located in the central portion of the site near the drainage channel and the large trash and fill pile. Samples LW11 and LW12 contained 86 ppb and 230 ppb total VOCs, respectively. All three samples contained a significant amount of SVOCs, including both PAHs and capahs. Total PAH concentrations in each sample were 22,100 ppb in LW11, 10,070 ppb in LW12 and 17,140 ppb in LW13. The concentration of total capahs in each sample was 11,360 ppb in LW11, 5,010 ppb in LW12 and 9,280 ppb in LW13.

All three samples also contained 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT at similar concentrations. Aroclor 1254 was detected at concentrations of 20 ppm, 12 ppm and 18 ppm, respectively.

The lead and mercury concentrations in each of the three samples was elevated compared to NJDEPE non-residential surface soil standards. Dioxin was not present in any of the three samples.

Drain Sample:

A single solid drain sample (D-1) indicated low levels (similar to those concentrations found in the blanks) of methylene chloride and acetone. Elevated levels (1,350 ppm) of phthalates were detected in the sample, as well as elevated SVOC TICs (2,020 ppm). No detectable concentrations of pesticides or PCBs were found, and, although most of the TAL

PAHs were detected in surface soils at concentrations which exceed NJDEPE non-residential clean-up standards. These same compounds were also detected in subsurface soil, although at generally lesser concentrations. The nature of PAHs favor adsorption onto soils. Given that PAHs were not detected in ground water across the site, there is no indication of a PAH plume migrating to the north on the site. However, elevated concentrations of PAHs were reported in downstream sediments indicating possible migration of these compounds with surface water to the south and off the site.

Phenols and phenolic compounds were detected infrequently on-site. Insufficient data exists to discuss the migration, if any, of this group of compounds across the site.

Phthalate compounds were detected frequently, and in some cases at elevated concentrations (greater than 1 ppm) in surface soils at the site. The level of phthalates detected in subsurface soil was generally less than that detected in surficial soil. In general, phthalate esters exhibit low water solubilities and a high affinity for organic matter. These properties are consistent with the observed distribution of phthalates at the site whereby higher concentrations of phthalates have been detected in soils as compared to ground water.

Pesticides/PCBs

Pesticides were detected across the entire site at generally low levels. Pesticides which were detected at elevated (ppm) concentrations include:

- alpha-BHC
- beta-BHC
- delta-BHC
- gamma-BHC (lindane)
- heptachlor
- heptachlor epoxide
- dieldrin
- 4, 4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- endrin
- methoxychlor
- endrin ketone
- alpha-chlordane
- gamma-chlordane

Pesticides were generally detected at a lower concentrations and frequency in sub-surface as compared to surface soils. This pattern of detection is consistent with surface disposal and/or migration of these compounds. PCBs were detected across the site at generally low levels (the highest PCB concentration detected was 16 ppm).

TABLE 3-1
CONTAMINANTS DETECTED IN SURFACE SOIL
ALBERT STEEL DRUM/PRENTISS DRUG AND CHEMICAL
Page 2 of 2

Parameter	NJDEPE Cleanup Standard ¹	Maximum Concentration	Location of Max. Concentration	# Samples Exceeding Standard
Pesticides/PCBs (ppb)				
alpha-BHC ²	460	570	B42-1	1 (0)
beta-BHC ²	1,600	4,200	B42-1	2 (0)
delta-BHC	-	160	B42-1	-
gamma-BHC(Lindane)	2,200	120	B21-1	-
Heptachlor	650	18,000	B11-1	1 (0)
Aldrin	170	35,000	B11-1	4 (0)
Heptachlor Epoxide	-	340	M11	-
Dieldrin	180	56,000	B33-1	15 (0)
4,4-DDE	9,000	6,600	B1-1	-
Endrin	310,000	5,900	B4-1	-
4,4-DDD	12,000	14,000	M1-1	1 (0)
4,4-DDT	9,000	300,000	B1-1	4 (0)
Methoxychlor	5,200,000	42,000	B7-1	-
Endrin Ketone	-	320	B63-1	-
alpha-Chlordane	-	1,100	B5-1	-
gamma-Chlordane	-	1,700	B5-1	-
Chlordane(total) ²	2,200	78,000	B33-1	21 (0)
PCBs(total)	2,000	81,000	B33-1	23 (1)
Inorganics (ppm)				
Aluminum	-	23,300	M51	-
Antimony	340	61.4	B55-1	-
Arsenic	20	222	M14S-1	19 (0)
Barium	26,000	4,160	B33-1	-
Beryllium	2	1.5	M14S-1	-
Cadmium	100	2,360	B33-1	2 (0)
Calcium	-	63,300	B43-1	-
Chromium ³	500	1,760	B13-1	3
Cobalt	-	432	B56-1	-
Copper	600	3,100	B33-1	8 (1)
Iron	-	223,000	B16-1	-
Lead	600	6,160	B31-1	33 (1)
Magnesium	-	10,300	M14S-1	-
Manganese	-	2,020	B33-1	-
Mercury	260	868	B13-1	2 (0)
Nickel	2,400	1,130	M31	-
Potassium	-	1,660	SS-16, B63-1	-
Selenium	1,000	3.4	B53-1	-
Silver	2,000	90	B24-1	-
Sodium	-	2,720	M51	-
Thallium	2	92	B16-1	1 (0)
Vanadium	7,000	455	B13-1	-
Zinc	1,500	2,890	M5-1	5 (0)
Cyanide	5,200	7,390	B27-1	1 (0)

NOTES:

- 1 NJDEPE Proposed Non-Residential Surface Soil Action Levels
 - 2 NJDEPE Proposed Non-Residential Surface Soil Action Levels, 7-1-92 Letter
 - 3 NJDEPE Proposed Action Level, 8-27-92 Comments on Phase II RI Report
- () - Indicates number of off-site surface soil samples exceeding standards

TABLE 3-3
CONTAMINANTS DETECTED IN SUBSURFACE SOIL
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL
Page 2 of 2

Parameter	Maximum Concentration	Location of Max. Concentration
<u>Pesticides/PCBs (ppb)</u>		
beta-BHC	13	B53-4
gamma-BHC(Lindane)	40	B5-4
Heptachlor	460	B7-4
Aldrin	23	B66-2
Heptachlor Epoxide	60	B20-3
Dieldrin	130	B29-3
4,4-DDE	64,000	B7-6
Endrin	80	B2-3
4,4-DDD	140,000	B7-6
4,4-DDT	310,000	B7-5
Methoxychlor	2,500	B5-4
alpha-Chlordane	4,500	M5-8
gamma-Chlordane	3,600	M5-8
Chlordane(total)	520	M63
PCBs(total)	40,000	M131-2
<u>Inorganics (ppm)</u>		
Aluminum	20,000	B48-2
Antimony	139	B64-2
Arsenic	113,000	B20-3
Barium	670	B54-2
Beryllium	28	B11-4
Cadmium	43	B50-2
Calcium	178,000	B49-2
Chromium	461	M32
Cobalt	25.9	M81-2
Copper	1120	B46-3
Iron	121,000	M32
Lead	3,140	M5-8
Magnesium	14,100	M53
Manganese	10,800	B43-3
Mercury	102	B49-2
Nickel	790	M32
Potassium	1870	B48-2
Selenium	2.6	B52-2
Silver	4.8	B55-2
Sodium	2,890	M52
Thallium	0.79	M81-2
Vanadium	72	M32
Zinc	3740	B64-2
Cyanide	44	M101-2

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TABLE 3-4
CONTAMINANTS DETECTED IN TEST PITS
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL
Page 2 of 2

Parameter	Maximum Concentration	Location of Max. Concentration
<u>Pesticides/PCBs (ppb)</u>		
alpha-BHC	23	TP1W
beta-BHC	160	TP1W
Dieldrin	280	TP3
4,4-DDE	650	TP3
4,4-DDD	8,000	TP2
4,4-DDT	22,000	TP2
Chlordane(total)	2,900	TP2, TP3
PCBs(total)	37,000	TP5S
<u>Inorganics (ppm)</u>		
Aluminum	2,940	TP4C
Antimony	308	TP4C
Arsenic	18.9	TP-7
Barium	438	TP4C
Beryllium	0.17	TP-7
Cadmium	59	TP4C
Calcium	13,200	TP4C
Chromium	400	TP4C
Cobalt	16	TP4C
Copper	560	TP-7
Iron	55,800	TP5C
Lead	2,820	TP4C
Magnesium	406	TP-7
Manganese	221	TP-7
Mercury	15	TP5C
Nickel	24.9	TP-7
Selenium	0.66	TP-7
Silver	2.4	TP-7
Sodium	837	TP4C
Vanadium	4.9	TP4C
Zinc	606	TP4C
Cyanide	6.8	TP4C

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TABLE 3-5
CONTAMINANTS DETECTED IN GROUND WATER
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL
Page 2 of 2

Parameter	NJDEPE Cleanup Standard ¹	Maximum Concentration	Location of Max. Concentration	# Samples Exceeding Standard
<u>Pesticides/PCBs (ppb)</u>				
Heptachlor Epoxide	1000	0.14	MW-5S	-
Dieldrin	1000	0.045	MW-14S	-
4,4-DDD	1000	0.26	MW-14S	-
alpha-Chlordane	1000	1.7	MW-5S	-
gamma-Chlordane	1000	1.9	MW-5S	-
Chlordane (total)	1000	6.4	MW-5S*	-
Aroclor - 1242	1000	3.3	MW-13S	-
Aroclor - 1254	1000	5.4	MW-13S	-
<u>In organics²</u>				
Aluminum	-	20,500	MW-12S	-
Antimony	-	32.6	MW-12S	-
Arsenic	-	40,100	MW-14S	-
Barium	-	4,460	MW-13S	-
Beryllium	-	2.7	MW-12S	-
Cadmium	-	51.8	MW-13S	-
Calcium	-	998,000	MW-1D	-
Chromium	-	3,110	MW-12S	-
Cobalt	-	38.3	MW-13S	-
Copper	-	430	MW-13S	-
Iron	-	152,000	MW-4S*	-
Lead	-	826	MW-5S	-
Magnesium	-	221,000	MW-1D	-
Manganese	-	7,440	MW-5I	-
Mercury	-	170	MW-5I	-
Nickel	-	182	MW-13S	-
Potassium	-	346,000	MW-12S	-
Selenium	-	14	MW-6S*	-
Silver	-	10	MW-5S*	-
Sodium	-	3,580,000	MW-12S	-
Vanadium	-	193	MW-12S	-
Zinc	-	1770	MW-13S	-
Cyanide	-	139	MW-12S	-

NOTES

- * - The Sample Was Collected during the Phase I Field Investigation
- 1 - NJDEPE Proposed Ground Water Action Levels (N.J.A.C. 7:26D)
- 2 - No Action Levels For Inorganics Are Available
- () - Indicates number of off-site samples exceeding standards

TABLE 3-5
CONTAMINANTS DETECTED IN GROUND WATER
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL
Page 2 of 2

Parameter	NJDEPE Cleanup Standard ¹	Maximum Concentration	Location of Max. Concentration	# Samples Exceeding Standard
<u>Pesticides/PCBs (ppb)</u>				
Heptachlor Epoxide	1000	0.14	MW-5S	-
Dieldrin	1000	0.045	MW-14S	-
4,4-DDD	1000	0.26	MW-14S	-
alpha-Chlordane	1000	1.7	MW-5S	-
gamma-Chlordane	1000	1.9	MW-5S	-
Chlordane (total)	1000	6.4	MW-5S*	-
Aroclor - 1242	1000	3.3	MW-13S	-
Aroclor - 1254	1000	5.4	MW-13S	-
<u>In organics²</u>				
Aluminum	-	20,500	MW-12S	-
Antimony	-	32.6	MW-12S	-
Arsenic	-	40,100	MW-14S	-
Barium	-	4,460	MW-13S	-
Beryllium	-	2.7	MW-12S	-
Cadmium	-	51.8	MW-13S	-
Calcium	-	998,000	MW-1D	-
Chromium	-	3,110	MW-12S	-
Cobalt	-	38.3	MW-13S	-
Copper	-	430	MW-13S	-
Iron	-	152,000	MW-4S*	-
Lead	-	826	MW-5S	-
Magnesium	-	221,000	MW-1D	-
Manganese	-	7,440	MW-5I	-
Mercury	-	170	MW-5I	-
Nickel	-	182	MW-13S	-
Potassium	-	346,000	MW-12S	-
Selenium	-	14	MW-6S*	-
Silver	-	10	MW-5S*	-
Sodium	-	3,580,000	MW-12S	-
Vanadium	-	193	MW-12S	-
Zinc	-	1770	MW-13S	-
Cyanide	-	139	MW-12S	-

NOTES

* - The Sample Was Collected during the Phase I Field Investigation

1 - NJDEPE Proposed Ground Water Action Levels (N.J.A.C. 7:26D)

2 - No Action Levels For Inorganics Are Available

() - Indicates number of off-site samples exceeding standards

TABLE 3-7
CONTAMINANTS DETECTED IN SURFACE WATER
ALBERT STEEL DRUM/PRENTISS DRUG AND CHEMICAL
Page 2 of 2

Parameter	NJDEPE Surface Water Quality Criteria	Maximum Concentration	Location of Max. Concentration	# Samples Exceeding Standard
<u>Pesticides/PCBs (ppb)</u>				
beta-BHC	0.137	0.17	SW3	1 (0)
Dieldrin	0.000135	0.48	SW-7, SW-15	3 (2)
alpha-Chlordane	0.000277	0.065	SW-7	1 (0)
gamma-Chlordane	0.000277	0.086	SW-7	1 (0)
Aroclor - 1254	0.000244	4.0	SW-15	5 (2)
<u>Inorganics (ppm)</u>				
Aluminum	87	2,150	SW-9	9 (2)
Arsenic	190	3,600	SW-14	2 (2)
Barium	2000	500	SW-7	-
Cadmium	0.905	378	SW-7	5 (1)
Calcium	-	624,000	SW-15	-
Chromium	11	15.1	SW-7	3 (0)
Cobalt	-	32	SW1	-
Copper	9.25	218	SW1	9 (2)
Iron	1000	14,700	SW1	7 (2)
Lead	2.2	307	SW-9	9 (2)
Magnesium	-	18,400	SW-14	-
Manganese	100	1,290	SW-7	7 (2)
Mercury	0.012	37.6	SW-14	9 (2)
Nickel	123.6	50	SW1	-
Potassium	-	19,900	SW-14	-
Selenium	5	1.3	SW-9	-
Sodium	-	55,300	SW-14	-
Vanadium	-	14.4	SW-9	-
Zinc	83.1	654	SW-9	8 (1)
Cyanide	5.2	13.9	SW-9	1 (0)

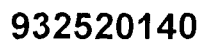
() - Indicates the number of off-site samples exceeding standards

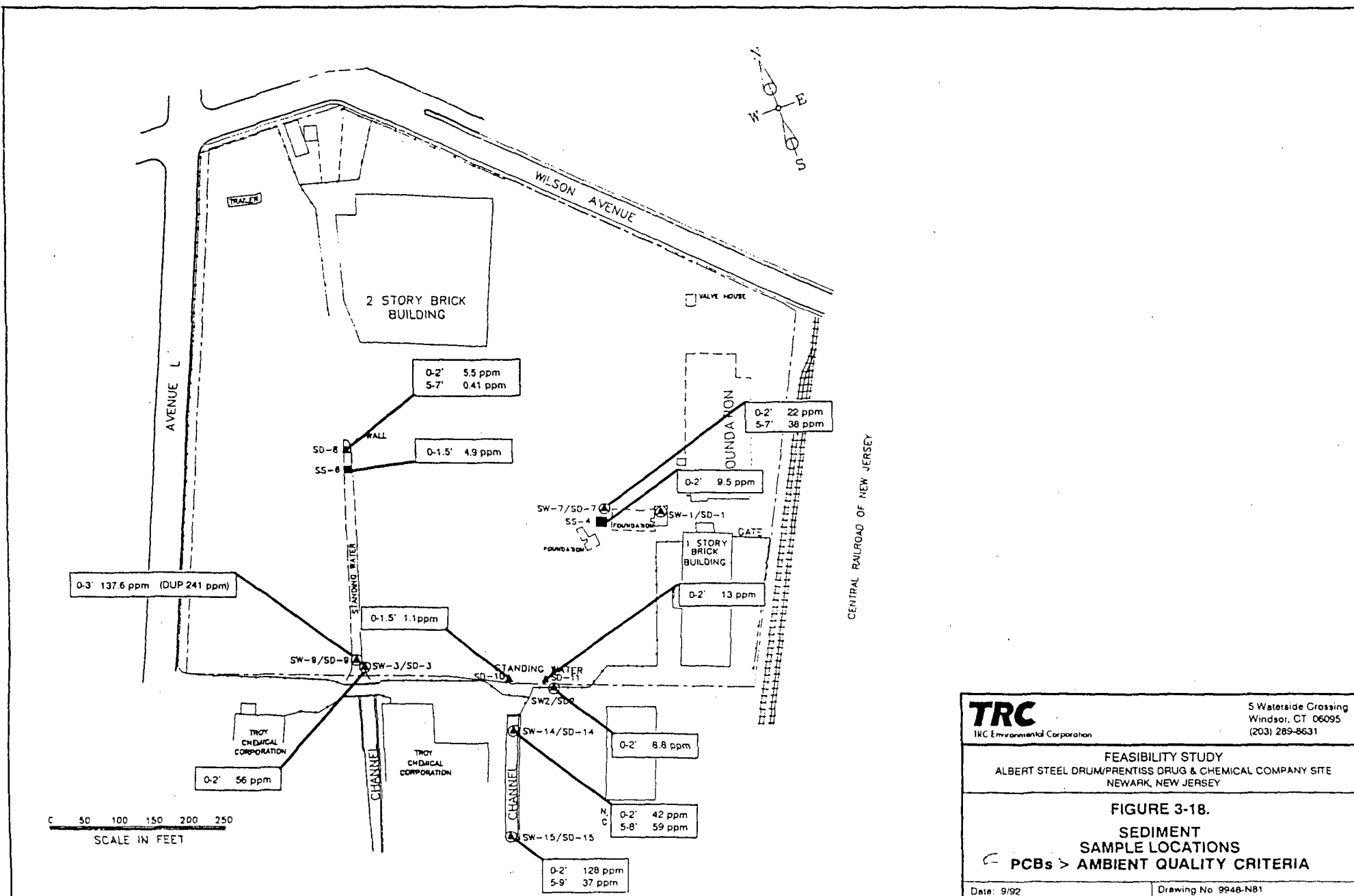
TABLE 3-8
CONTAMINANTS DETECTED IN SEDIMENT AT ALBERT STEEL DRUM
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL
Page 2 of 2

Parameter	NJDEPE Sediment Quality Criteria/ ER-M Values	Maximum Concentration	Location of Max. Concentration	# Samples Exceeding Standard
Pesticides/PCBs (ppb)				
alpha-BHC	-	110	SD11-1	-
Aldrin	-	11,000	SD7-1	-
Dieldrin	0.00976 ²	29,000	SD9-1	5 (2)
4,4-DDE	-	1,900	SD-3	-
Endrin	0.00654 ²	690	SD11-2	1 (0)
4,4-DDD	-	160,000	SD14-1	-
4,4-DDT	0.183 ²	18,000	SD-3	5 (0)
alpha-Chlordane	-	5,500	SD9-1	-
gamma-Chlordane	-	7,800	SD9-1	-
Chlordane(total)	6 ¹	9,700	SS-4	13 (4)
PCBs (total)	-	241,000	SD9-1	-
Inorganics (ppm)				
Aluminum	-	14,300	SS-6	-
Antimony	25 ¹	31.6	SD9-1	3
Arsenic	85 ¹	2,560	SD11-1	12 (4)
Barium	-	2,390	SD15-1	-
Beryllium	-	2	SD14-2	-
Cadmium	9 ¹	589	SD15-1	13 (3)
Calcium	-	38,000	SD15-1	-
Chromium	145 ¹	636	SD15-1	9 (3)
Cobalt	-	527	SD15-1	-
Copper	390 ¹	1,460	SS-6	11 (2)
Iron	-	45,500	SD15-1	-
Lead	110 ¹	11,038	SD14-2	16 (3)
Magnesium	-	9,220	SD11-2	-
Manganese	-	1,460	SD10-2	-
Mercury	1.3 ¹	1,580	SD-2	16 (2)
Nickel	50 ¹	198	SD15-1	9 (2)
Potassium	-	934	SD10-2	-
Selenium	-	4.7	SD9-1	-
Silver	2.2 ¹	175	SS-6	13 (3)
Sodium	-	4,590	SS-6	-
Vanadium	-	82	SS-6	-
Zinc	270 ¹	3,890	SS-6	9 (3)
Cyanide	-	46	SS-6	-

NOTES

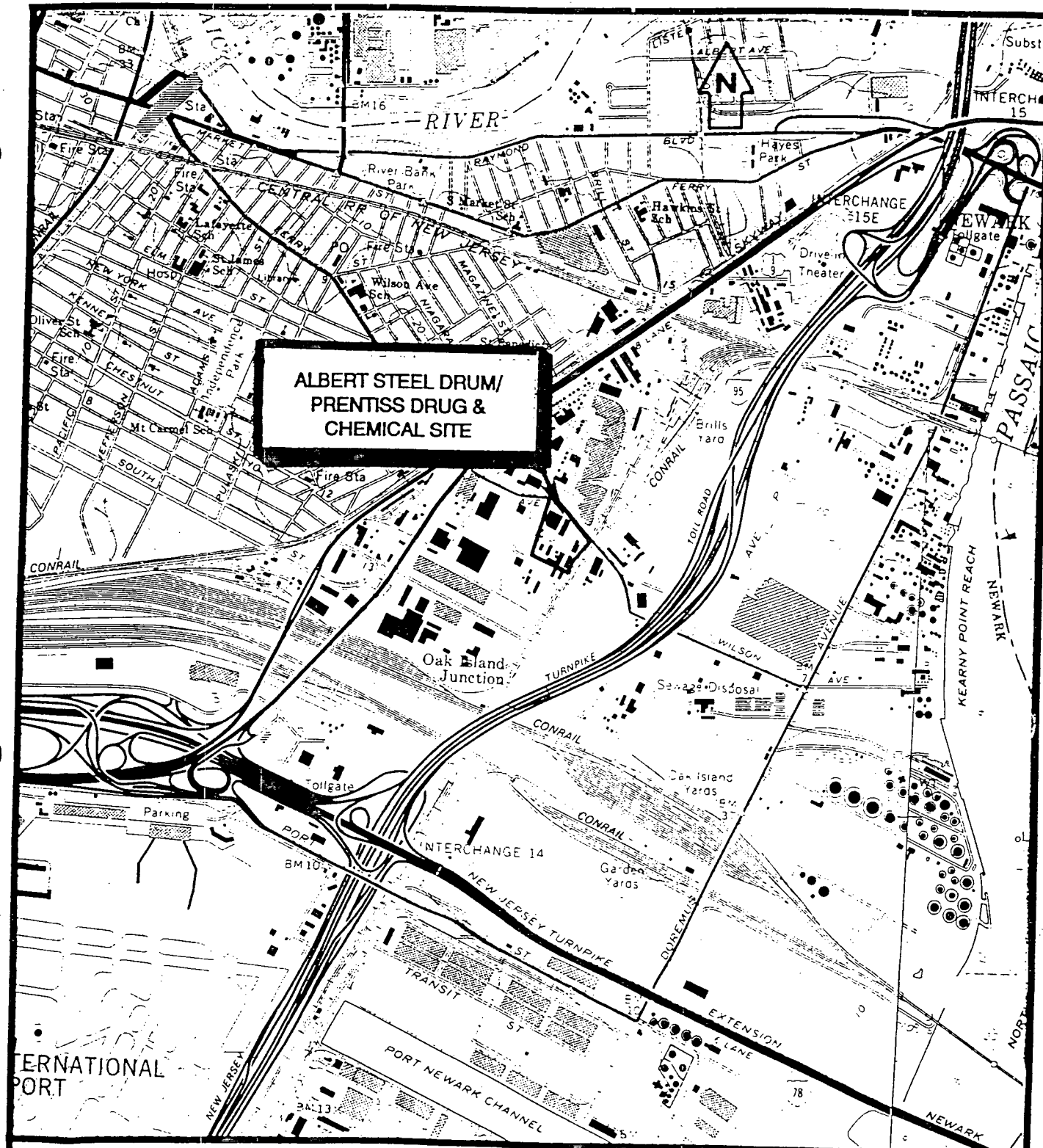
- 1 Effects Range-Median (ER-M) values taken from the NJDEPE Guidance for Sediment Quality Evaluations
 - 2 Sediment Quality Criteria taken from the NJDEPE Guidance for Sediment Quality Evaluations. Actual Sediment Quality Criteria values are based on Total Organic Carbon content for each individual sample. Refer to Albert Steel Drum/Prentiss Drug & Chemical RI Report for specific criteria values.
- () - Indicates the number of off-site samples exceeding standards





TRC IRC Environmental Corporation	5 Waterside Crossing Windsor, CT 06095 (203) 289-8631
	FEASIBILITY STUDY ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL COMPANY SITE NEWARK, NEW JERSEY
FIGURE 3-18. SEDIMENT SAMPLE LOCATIONS PCBs > AMBIENT QUALITY CRITERIA	
Date: 9/92	Drawing No. 9948-N81

932520141



0 2000 FT
SCALE

Source: USGS 7.5' Elizabeth, N.J.-N.Y. and Jersey City, N.J.-N.Y. Topographic Quadrangle

TRC

TRC Environmental Corporation

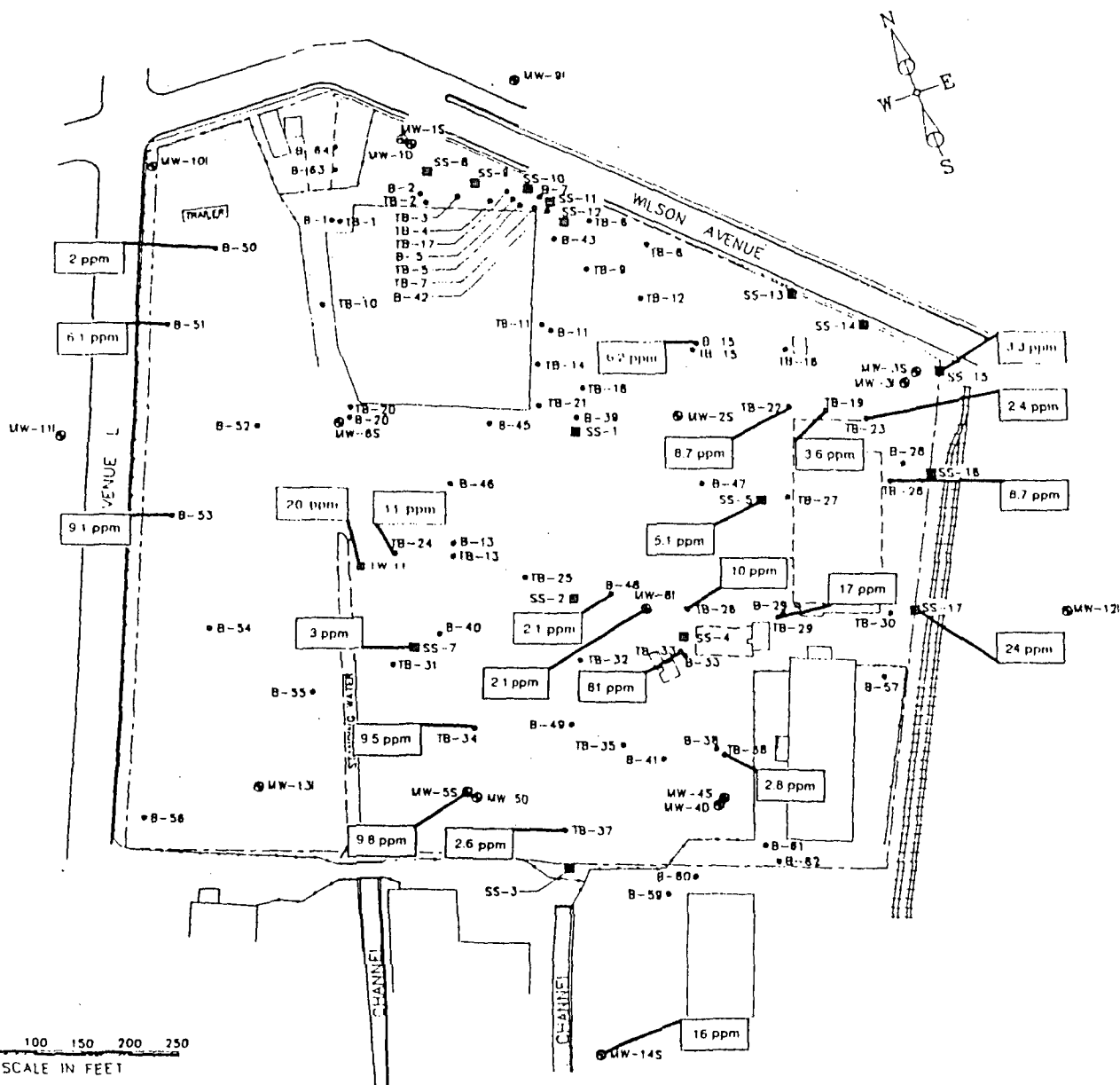
5 Waterside Crossing
Windsor, CT 06095
(203) 289-8631

FEASIBILITY STUDY
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL COMPANY SITE
NEWARK, NEW JERSEY

FIGURE 1-2.
LOCUS PLAN

Date: 9/92

Drawing No. 9948-N81



TRC

TRC Environmental Corporation

5 Waterside Crossing
Windsor, CT 06095
(203) 289-8631

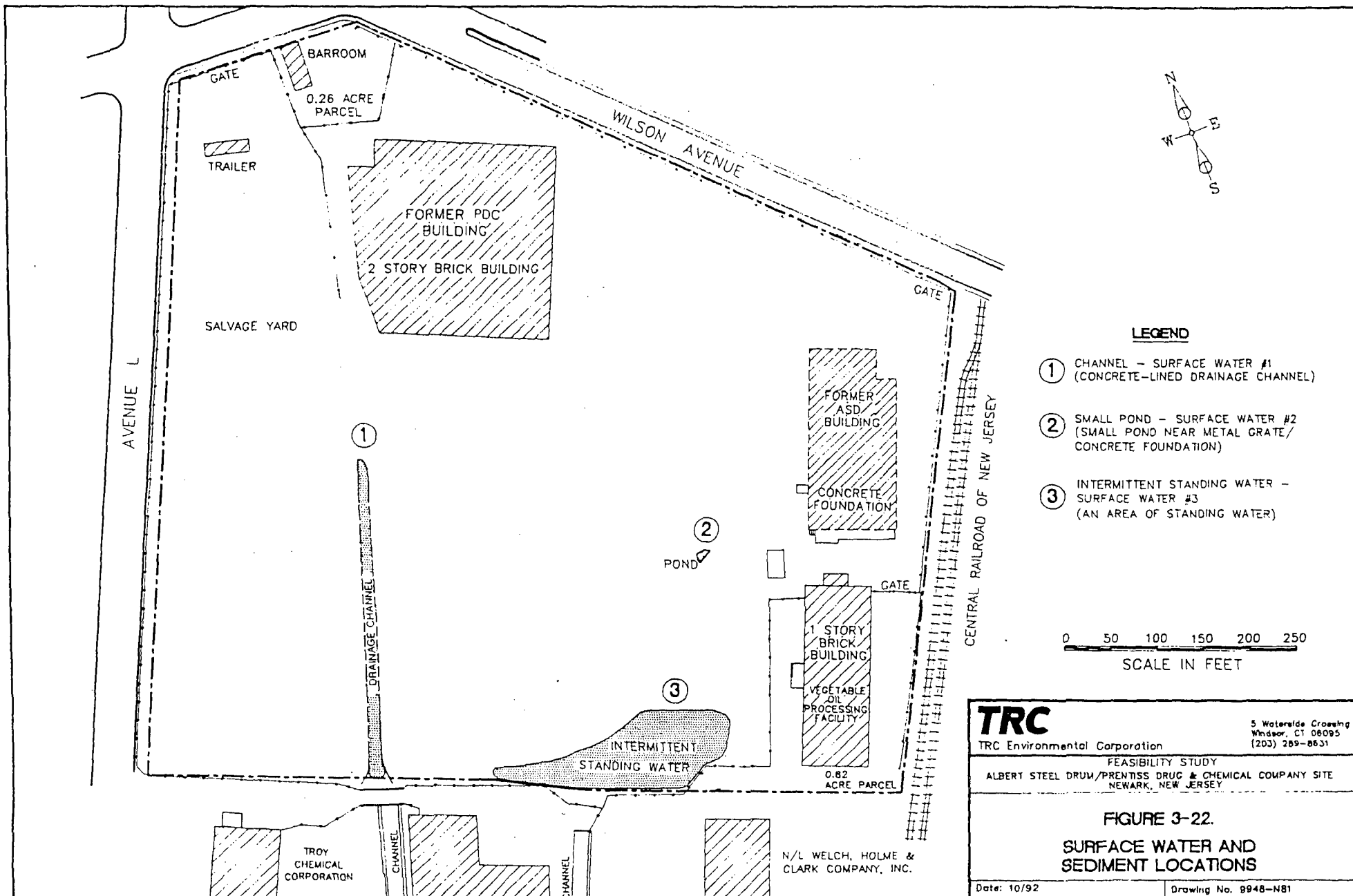
FEASIBILITY STUDY
ALBERT STEEL DRUM/PRENTISS DRUG & CHEMICAL COMPANY SITE
NEWARK, NEW JERSEY

FIGURE 3-3.
SURFACE SOIL
SAMPLE LOCATIONS
PCBs > NON-RESIDENTIAL
SURFACE SOIL CLEANUP STANDARDS (2ppm)

Date: 9/92

Drawing No. 9948-N81

932520143



**NEWARK BAY ESTUARY
PRELIMINARY PRP INVESTIGATION**

DRAFT

**SUMMARY OF EVIDENCE PERTAINING TO:
PRENTISS DRUG & CHEMICAL CORPORATION
338 WILSON AVENUE
NEWARK, NEW JERSEY**

**PREPARED BY:
KROLL ASSOCIATES, INC.
PARSIPPANY, NJ**

MARCH, 1995

**PRIVILEGED AND CONFIDENTIAL COMMUNICATION
PREPARED AT THE REQUEST OF COUNSEL**

932520145

AAD0000002

AAD0000001

PRENTISS DRUG AND CHEMICAL COMPANY
(AKA ALBERT STEEL DRUM COMPANY)
338 WILSON AVENUE
NEWARK, ESSEX COUNTY, NEW JERSEY
EPA ID# NJD002443331

GENERAL INFORMATION AND SITE HISTORY

The Prentiss Drug and Chemical, Albert Steel Drum (PDC/ASD) Site is located on nine acres on Wilson Avenue in Newark, Essex County. It lies in a heavily industrialized section of Newark, with the nearest residential or commercial area about one quarter of a mile to the west across the Pulaski Skyway. The site is bordered to the north-northeast by Wilson Avenue, to the southeast by Central Railroad and the Welsh, Holmes and Clark Company, to the southwest by the Troy Chemical Company, and to the northwest by an automobile junkyard.

The site has been occupied by numerous industries since the early 1900s and an undated city map indicates approximately twenty buildings to be present, many of which may have had multiple occupants. The uses of most of these buildings are unknown. Of the former occupants of the site which could be identified, their operating dates are generally sketchy. These occupants include the Prentiss Drug and Chemical Company (PDC), the Albert Steel Drum Company (ASD), Greenpoint Drum and Barrel Corporation, Welch, Holmes, and Clark Company (WHC), T. Fiore Demolition, Courtesy Containers Corporation, and an automobile junkyard. Known details of their operations are described below.

SITE OPERATIONS OF CONCERN

1. PRENTISS DRUG AND CHEMICAL COMPANY

PDC manufactured pesticides and rodenticides from approximately 1956 until the process was discontinued in June 1982. The plant shut down permanently in August 1982. Chemicals used by PDC in the manufacture of pesticides reportedly included pentachlorophenol (PCP), lindane, methoxychlor, dieldrin, aldrin, and endrin. PDC manufactured a rodenticide known as "Rax Powder" for a number of years. "Rax Powder" consists of warfarin [3-(~~4~~- acetonyl benzene)-4-hydroxycoumarin], a colorless odorless solid at a concentration of 0.5%, along with a green dye.

Lindane was reportedly purchased by the facility at a rate of 25 to 100 tons per year for use in the manufacture of pesticides. Lindane, a Class II pesticide, is moderately likely to be associated with the presence of halogenated dibenzo-p-dioxins, while PCP, which was reportedly manufactured on site, is a Class I pesticide and highly likely to be associated with their presence.

Little information was available concerning EPA or NJDEP inspections of the PDC facility, however, an inspection was conducted in 1977 by NJDEP. Building floordrains which emptied directly to the ground were observed and process wastewater which emptied into sanitary sewers was noted.

Albert Steel Drum

Albert Steel Drum

338 Wilson Avenue

Newark City

Essex County

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Manufacturing-Chemicals
OPERATION STATUS: Abandoned

PROPERTY SIZE: 14 Acres

SURROUNDING LAND USE: Industrial

MEDIA AFFECTED

CONTAMINANTS

STATUS

Ground Water

Volatile Organic Compounds
Inorganic Compounds
Chlorodane

Delineated

Surface Water

Polychlorinated Biphenyls (PCBs)
Dioxin

Delineated

Soil

Metals
Pesticides
Volatile Organic Compounds
Dioxin

Delineated

Sediment

Metals

Delineated

Structure

Polychlorinated Biphenyls (PCBs)

Delineated

FUNDING SOURCE(S): Federal
State

ACO SIGNED: 05/01/80
FINANCIAL ASSURANCE: \$0.16M Posted

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Contamination of this abandoned facility has resulted from various operations as well as buried and scattered drums throughout the site. Previous owners of the site include Prentis Drug and Chemical Company, which produced pesticides and specialty chemicals, and Albert Steel Drum, which operated a drum re-conditioning facility. Site ownership was assumed by the Newark Redevelopment and Housing Authority in 1977. The site was secured with a fence in 1987. Initial sampling performed during the Remedial Investigation (RI) confirmed contamination of the soil, surface and ground waters, structures and sediment. Currently the RI is being finalized and the Feasibility Study (FS) to evaluate remedial alternatives is being prepared.

FOR FURTHER INFORMATION CONTACT: Site Remediation Program
Bureau of Community Relations
609-984-3081

PROJECT NAME RI/FS DESIGN CONSTR

Fencing

Completed or Not Required

Sitewide

Planned

Planned

Underway

Completed or
Not Required

Tidewater Bailing

932520151

VIOLATION(S): TSCA 13

Pollutant(s): ASBESTOS

Facility: G & F RECYCLING & SALVAGE CORP

Address: 170-180 FRESLINGUYSEN
NEWARK, NJ 07114

Penalty (\$): 40,000 Superfund Cost Awarded (\$):

Judicial District: DNJ Docket Number: 88-2576

Result: Consent instrument with penalty

Administrative Action 02-88-0166 Case Name: HEUBACH INCORPORATED

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 03/02/1988 Conclusion Date: 07/26/1988

Defendant: HEUBACH INCORPORATED

Law(s): TSCA 13

Violation(s): Imports

Facility: HEUBACH INC

Address: NEWARK, NJ 07114

Penalty (\$): 3,600 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-88-0216 Case Name: ~~TIDEWATER-BALING CORPORATION~~

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 03/28/1988 Conclusion Date: 09/26/1990

Defendant: TIDEWATER BALING CORP

Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s): ~~PCE~~

Facility: TIDEWATER BALING CORP

Address: NEWARK, NJ 07101

Penalty (\$): 27,000 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-88-0239 Case Name: SCP-NEWARK-I

Type: CERCLA ORDER FOR RESPONSE ACTION

File Date: 03/29/1985 Conclusion Date: 03/29/1985

Defendant: SCP-NEWARK-I

Law(s): CERCLA 106

Facility: SCIENTIFIC CHEMICAL PROCESSING

Address: NEWARK, NJ 07105

Penalty (\$): Superfund Cost Awarded (\$):

Result: Consent instrument with no penalty

Administrative Action 02-88-0240 Case Name: SCP-NEWARK II

Type: CERCLA ORDER FOR RESPONSE ACTION

File Date: 04/03/1985 Conclusion Date: 04/03/1985

Defendant: SCP-NEWARK II

Law(s): CERCLA 106

Facility: SCIENTIFIC CHEMICAL PROCESSING

Address: NEWARK, NJ 07105

Penalty (\$): Superfund Cost Awarded (\$):

932520152

Dresser Industries

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
COMMUNITY RIGHT TO KNOW SURVEY FOR 1991

000042

PART 1

to satisfy requirements under SARA, Title III, Section 312
and New Jersey Community Right to Know

Please type this form.

2-28-92

<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"><input type="checkbox"/> 1 8 5 2 1 8 0 0 0 0 0--3 5 6 1--0 9 0 4</div> <p>DRESSER INDUSTRIES INC. (HARRISON)</p> <p>DRESSER PUMP DIV. ATTN: CAROL CROSSMAN 401 WORTHINGTON AVE. HARRISON, NJ 07029</p>	<p>(A) FACILITY LOCATION</p> <p>If the facility location is different than the address on the facility identification label on Part 2 or is not shown, enter the correct facility address below and correct the facility identification label.</p> <p>-----</p> <p>-----</p> <p>-----</p>		
<p>(B) Does this facility <u>use, store or produce</u> any compressed gases, or any flammable, combustible, reactive, corrosive or toxic substances?</p> <p>(See Reportable Substances and Thresholds) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>(D) Number of employees at facility: <u>350</u></p> <p>(E) Number of facilities in New Jersey: <u>2</u></p> <p>(F) Dun and Bradstreet No. <u>99-134-3088</u></p> <p>(G) Check the box if you have a R&D laboratory exemption or if you have attached a R&D exemption application. <input type="checkbox"/></p>		
<p>(C) Briefly describe the nature of the operations or business conducted by your company at this facility: <u>PUMP MANUFACTURING AND TESTING</u></p> <p>-----</p> <p>-----</p>			
<p>(H) CERTIFICATION OF OWNER/OPERATOR OR AUTHORIZED REPRESENTATIVE — I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.</p> <p>Signature <u>Joseph F. Bello</u> Date <u>2/28/92</u> Fax # <u>(201) 484-1658</u> Name (Type) <u>JOSEPH F. BELLO</u> Phone # <u>(201) 484-1234</u> Title <u>GENERAL MANAGER</u></p>			
<p>(I) POLICE AND FIRE DEPARTMENT — Enter the respective phone numbers, names and addresses (including Zip Code) of your local police and fire departments in the spaces below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%; padding: 5px; vertical-align: top;"><p>POLICE DEPT. Phone Number <u>(201) 483-4100</u> Name <u>Harrison Police Department</u> Address <u>321 Cleveland Ave.</u> Municipality <u>Harrison, NJ</u> Zip <u>07029</u></p></td><td style="width: 50%; padding: 5px; vertical-align: top;"><p>FIRE DEPT. Phone Number <u>(201) 483-0611</u> Name <u>Harrison Fire Department</u> Address <u>7th & Sussex Street</u> Municipality <u>Harrison, NJ</u> Zip <u>07029</u></p></td></tr></table>		<p>POLICE DEPT. Phone Number <u>(201) 483-4100</u> Name <u>Harrison Police Department</u> Address <u>321 Cleveland Ave.</u> Municipality <u>Harrison, NJ</u> Zip <u>07029</u></p>	<p>FIRE DEPT. Phone Number <u>(201) 483-0611</u> Name <u>Harrison Fire Department</u> Address <u>7th & Sussex Street</u> Municipality <u>Harrison, NJ</u> Zip <u>07029</u></p>
<p>POLICE DEPT. Phone Number <u>(201) 483-4100</u> Name <u>Harrison Police Department</u> Address <u>321 Cleveland Ave.</u> Municipality <u>Harrison, NJ</u> Zip <u>07029</u></p>	<p>FIRE DEPT. Phone Number <u>(201) 483-0611</u> Name <u>Harrison Fire Department</u> Address <u>7th & Sussex Street</u> Municipality <u>Harrison, NJ</u> Zip <u>07029</u></p>		
<p>(J) FACILITY EMERGENCY CONTACT</p> <p>Name <u>John A. Rapetsky</u> Title <u>Facilities Engineer</u> Facility Phone Number <u>(201) 484-1234</u> Emergency Contact Phone Number <u>(201) 484-1234</u></p>			
<p>NOTE: Make copies of this survey! The law requires that you send a copy to your COUNTY LEAD AGENCY, LOCAL EMERGENCY PLANNING COMMITTEE AND YOUR LOCAL POLICE AND FIRE DEPARTMENTS. (County agency and local committee addresses in Instructions)</p> <div style="display: flex; justify-content: space-between;"><div style="width: 50%;">Return original to: NJDEPE COMMUNITY RIGHT TO KNOW CN 405 Trenton, NJ 08625-0405</div></div>			

FOR INTERNAL USE ONLY

U STAT ☐

F STAT ☐

932520155

CHEMICAL INVENTORY PAGE

Page

18021800000

DRESSER INDUSTRIES INC. (HARRISON)

401 WORTHINGTON AVE., HARRISON

IMPORTANT!

Read all instructions before completing.

Please type all responses.

Reporting Period: January 1 - December 31, 1991

CHEMICAL DESCRIPTION	HAZARDS	Inventory (Ranges)	STORAGE CODES AND LOCATIONS
Substance <u>Paints, ENAMELS, Lacquers, Stains</u> CAS No. _____ DOT No. <u>1263</u> Substance No. (if available) <u>2628</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	(Codes for all that apply.) <u>70, 69, 67,</u> <u>66, _____</u>	(Enter Code) Max. Daily <u>13</u> Avg. Daily <u>12</u> Days Onsite <u>365</u> (Actual Number)	(Enter Codes, except Location(s); supply narrative.) Container <u>46</u> Conditions <u>01, 04</u> Location(s) <u>Paint Shed, Bldg #2</u> <u>Maint.</u>
Substance <u>Petroleum Distillates</u> CAS No. <u>8002-05-9</u> DOT No. <u>1268</u> Substance No. (if available) <u>2648</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 68, 67,</u> <u>66, _____</u>	Max. Daily <u>13</u> Avg. Daily <u>12</u> Days Onsite <u>365</u> (Actual Number)	Container <u>47</u> Conditions <u>01, 04</u> Location(s) <u>Bldg #2 - Paint Area</u>
Substance <u>Petroleum Oil</u> CAS No. _____ DOT No. <u>1270</u> Substance No. (if available) <u>2651</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, 66,</u> <u>_____</u>	Max. Daily <u>13</u> Avg. Daily <u>13</u> Days Onsite <u>365</u> (Actual Number)	Container <u>47</u> Conditions <u>01, 04</u> Location(s) <u>Bldg #1, 2, 3, 6 & 58</u>
Substance <u>Petroleum Oil</u> CAS No. _____ DOT No. <u>1270</u> Substance No. (if available) <u>2651</u> Percent <u>60</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 67, 66,</u> <u>_____</u>	Max. Daily <u>12</u> Avg. Daily <u>12</u> Days Onsite <u>365</u> (Actual Number)	Container <u>50</u> Conditions <u>01, 04</u> Location(s) <u>Bldg #4 - South</u> <u>2 - 500 Galon Steel Tanks</u>
Substance <u>Phosphoric Acid</u> CAS No. <u>7664-38-02</u> DOT No. <u>1805</u> Substance No. (if available) <u>1516</u> Percent <u>52</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>68, 67, _____</u> <u>_____</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>38</u> Conditions <u>9, 04</u> Location(s) <u>Powerhouse</u>
Substance <u>Polychlorinated Biphenyls</u> CAS No. <u>1336-36-3</u> DOT No. <u>2315</u> Substance No. (if available) <u>1554</u> Percent <u>51</u> State <u>L</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>70, 68, 67,</u> <u>66, _____</u>	Max. Daily <u>10</u> Avg. Daily <u>10</u> Days Onsite <u>365</u> (Actual Number)	Container <u>34</u> Conditions <u>01, 04</u> Location(s) <u>Transformers</u>
Substance <u>Radioactive Material</u> CAS No. _____ DOT No. <u>2974</u> Substance No. (if available) <u>2735</u> Percent <u>52</u> State <u>S</u> Trade Secret <input type="checkbox"/> (Code) (Code) (Check if claiming)	<u>67, 66, _____</u> <u>_____</u>	Max. Daily <u>09</u> Avg. Daily <u>09</u> Days Onsite <u>365</u> (Actual Number)	Container <u>34</u> Conditions <u>_____</u> Location(s) <u>X-Ray - Bldg #3</u>

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See Instructions for codes.

Photocopy this sheet, if you need additional forms.

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SUPPLEMENTAL SAMPLING PLAN RESULTS
WORTHINGTON/DRESSER PUMP
HARRISON, NEW JERSEY

ACO ECRA CASE NUMBER 85034

VOLUME I

SUMMARY OF FINDINGS AND
PROPOSED REMEDIAL ACTIVITIES

Prepared for:

Cooper Industries
Houston, Texas

Prepared by:

Caswell, Eichler and Hill, Inc.
Portsmouth, New Hampshire

and

Columbia, Maryland

May 31, 1990

TABLE 11. POLYCHLORINATED BIPHENYLS IN SOIL

FOUNDRY-INTERNAL

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Aroclor Type	Concentration (ug/g)
FI-MP-4A	(0.5-1.0)	2/10/90	2/10/90	E	1254	0.2365
FI-MP-5A	(0.5-1.0)	3/11/90	3/11/90	DD	1254	0.0585
FI-MP-7B	(2.5-3.0)	3/11/90	3/11/90	DD	1254	0.0706
FI-MP-7B (dup)	(2.5-3.0)	3/11/90	3/11/90	DD	1254	0.0604

* - Concentration exceeds NJDEP CUL of 1-5 ug/g

(3)

TABLE 12. METALS IN SOIL

FOUNDRY-INTERNAL

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Concentration (ug/g)			
					Chromium	Copper	Mercury	Nickel
FI-MP-1A	(0.5-1.0)	2/6/90	2/6/90	A	11.6	22.5	0.15	20.0
FI-MP-2A	(0.5-1.0)	2/6/90	2/6/90	A	24.7	104	0.093	33.4
FI-MP-2C	(4.5-5.0)	2/10/90	2/11/90	F	7.5	6.45	ND	7.47
FI-MP-3A	(0.5-1.0)	2/10/90	2/10/90	E	11.8	49.6	ND	42.0
FI-MP-3A (dup)	(0.5-1.0)	2/10/90	2/10/90	E	13.1	46.6	ND	35.0
FI-MP-3C	(4.5-5.0)	3/11/90	3/11/90	DD	3.0	88.1	ND	ND
FI-MP-4A	(0.5-1.0)	2/10/90	2/10/90	E	31.9	153	ND	130 *
FI-MP-5A	(0.5-1.0)	3/11/90	3/11/90	DD	2.65	33.2	0.156	19.3
FI-MP-6C	(4.5-5.0)	3/11/90	3/11/90	DD	2.33	27.2	0.121	14.4
FI-MP-7B	(2.5-3.0)	3/11/90	3/11/90	DD	3.6	15.1	0.147	11.7
FI-MP-7B (dup)	(2.5-3.0)	3/11/90	3/11/90	DD	3.24	22.7	0.120	8.44

ND - Not detected

* - Concentration exceeds the NJDEP CUL

(1)

TABLE 15. PETROLEUM HYDROCARBONS IN SOIL

FOUNDRY-EXTERNAL (NORTH)

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Concentration (ug/g)
FEN-4b4-4D	<12.5-13.0>	3/6/90	3/6/90	U	40
FEN-4b5-4D	<12.5-13.0>	3/5/90	3/5/90	U	94
FEN-CH-2A	<3.5-4.0>	2/26/90	2/26/90	Q	64
FEN-CH-2C	<12.5-13.0>	2/26/90	2/26/90	Q	64

* - Concentration above background level of 200 ug/g

<9>

TABLE 16. POLYCHLORINATED BIPHENYLS IN SOIL

FOUNDRY-EXTERNAL (NORTH)

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Aroclor Type	Concentration (ug/g)
FEN-4b4-1A	<0.5-1.0>	3/5/90	3/5/90	U	1254	0.554
FEN-4b4-2B	<2.5-3.0>	3/6/90	3/6/90	U	1254	0.0391
FEN-4b4-3A	<0.5-1.0>	3/6/90	3/6/90	U	1254	2.23 *
FEN-4b5-2A	<0.5-1.0>	3/5/90	3/5/90	U	1254	0.149

* - Concentration above NJDEP CUL of 1-5 ug/g

<8>

TABLE 22. POLYCHLORINATED-BIPHENYLS IN SOIL

FOUNDRY-EXTERNAL (EAST)

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Arochlor Type	Arochlor ug/g
FEE-1A	(0.5-1.0)	2/7/90	NS	B	1260	0.2585 J
FEE-2A	(0.5-1.0)	2/7/90	NS	D	1260	0.0709 J
FEE-4A	(0.5-1.0)	2/8/90	2/8/90	D	1221	0.5495
FEE-4c4-3A	(0.5-1.0)	3/5/90	3/5/90	W	1260	0.454
FEE-4c4-4A	(0.5-1.0)	3/5/90	3/5/90	W	1254	0.070

NS -Not submitted

* - Concentration above NJDEP CUL of 1-5 ug/g

(35)

TABLE 23. METALS IN SOIL

FOUNDRY - EXTERNAL (EAST)

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Metals (ug/g)				
					Arsenic	Chromium	Copper	Nickel	Zinc
FEE-9A	(0.5-1.0)	2/27/90	2/27/90	R	NA	24.7	218 *	21.1	NA
FEE-10C	(4.5-5.0)	2/27/90	2/27/90	R	NA	10.3	32.3	21.1	NA
FEE-11B	(2.5-3.0)	2/27/90	2/27/90	R	1.34	11.1	17.0	13.3	ND
FEE-11D	(11.5-12.0)	2/28/90	2/28/90	S	0.299	12.9	33.3	26.2	91.5
FEE-13B	(2.5-3.0)	2/27/90	2/27/90	R	NA	11.9	23.3	26.2	NA
FEE-13C	(4.5-5.0)	2/27/90	2/27/90	R	NA	14.8	41.7	23.3	NA
FEE-4c4-1A	(0.5-1.0)	3/5/90	3/5/90	W	NA	14.4	52.2	15.8	NA
FEE-4c4-1A (dup)	(0.5-1.0)	3/5/90	3/5/90	W	NA	13.3	58.7	13.5	NA
FEE-4c4-2A	(0.5-1.0)	3/5/90	3/5/90	W	NA	14.5	127	23.5	NA
FEE-4c4-2B	(2.0-2.5)	3/5/90	3/5/90	W	NA	19.7	138	33.3	NA
FEE-4c4-3A	(0.5-1.0)	3/5/90	3/5/90	W	NA	204 *	281 *	282 *	NA
FEE-4c4-4A	(0.5-1.0)	3/5/90	3/5/90	W	NA	10.4	214 *	17.7	NA

NA - Not analyzed

* - Concentration exceeds NJDEP CUL

(25)

TABLE 50. PETROLEUM HYDROCARBONS IN SOIL

TRANSFORMER AREA

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Concentration ug/g
TRANS-3A	(0.5-1.0)	3/8/90	3/8/90	Y	32

* - Concentration above background level of 200 ug/g

TABLE 51. POLYCHLORINATED BIPHENYLS IN SOIL

TRANSFORMER AREA

Sample Designation	Sample Interval (feet)	Sample Date	Field Blank	Method Blank	Aroclor Type	Concentration (ug/g)
TRANS-1A	(0.5-1.0)	3/6/90	3/6/90	W	1260	0.261
TRANS-3A	(0.5-1.0)	3/8/90	3/8/90	Y	1260	0.0924

* - Concentration above NJDEP CUL of 1 ug/g

TABLE II-13. ~~PCB'S DETECTED IN SOILS COLLECTED OUTSIDE THE~~
~~FOUNDRY BUILDING~~

Sample ID No.	Date Collected	Dilution ⁽¹⁾ Factor	Aroclor (ug/g)		
			1248	1254	1260
4b-4 (0-6")	5/1/89	5.5	ND ⁽²⁾	2.6	ND
(12-18")	5/1/89	6.0	ND	0.98	ND
4b-5 (0-6")	5/1/89	5.5	ND	ND	12.0 ⁽³⁾
(12-18")	5/1/89	1.1	ND	ND	0.34
4c-1 (0-6")	5/2/89	5.5	ND	4.5	ND
4c-1 (duplicate)		6.0	ND	2.3	ND
4c-2 (0-6")	5/2/89	6.5	ND	2.6	ND
4c-3 (0-6")	5/2/89	6.5	ND	3.1	ND
4c-4 (0-6")	5/2/89	6.0	ND	31.0	ND
4c-5 (0-6")	5/2/89	6.5	ND	2.6	ND
4c-6 (0-6")	5/2/89	6.0	ND	1.7	ND
4c-7 (0-6")	5/4/89	5.7	0.98	1.2	ND
Method Detection Limit			0.08	0.16	0.16

1. Method detection limit must be increased by this factor.
2. Denotes compound not detected.
3. Boldface denotes concentration exceeds CUL of 1-5 ug/g

b. Inorganic Analyses

(1) PP-Metals

Table II-14 lists the PP-metals detected in soils outside the foundry. The samples that display the highest concentrations are those collected along the northern portion of the external foundry building, 4b-(1-7). These sample locations, except 4b-2, were sampled at two different depths. Only sample location 4b-6 experienced a decrease in concentration, in all metal parameters, with an increase in sample depth. Some contamination, particularly copper, was also documented in the eastern portion of the external foundry area (samples 4c-(1-6)). The field blank associated with samples 4c-(1-6) contained some trace concentrations of chromium, copper, nickel, lead, and zinc. The concentrations were 0.02, 0.03, 0.04, 0.025, and 0.28 mg/L respectively.

(2) Asbestos

Samples 4b-2, 4b-6 (0-6"), 4b-6 (12-18"), 4b-7 (0-6"), and 4b-7 (12-18") were analyzed for asbestos content (Table II-15). The asbestos material chrysotile was found in samples 4b-6 (0-6") and 4b-7 (0-6"), both at less than 1%. It was

TABLE II-19 PCB's DETECTED IN SOILS COLLECTED ALONG THE EASTERN PROPERTY LINE.

Sample I.D. No.	Date Collected	Dilution ⁽¹⁾ Factor	Aroclor (ug/g)	
			1254	1260
4d-2	5/4/89	6.8	ND	6.9
4d-3	5/4/89	5.4	ND ⁽²⁾	0.36
4d-4	5/1/89	1.1	ND	0.63
4e-2	5/4/89	6.0	3.7	ND
4g-1	5/1/89	1.1	ND	0.24
4h-1	5/5/89	1.2	ND	0.59
4h-2	5/5/89	1.2	ND	35.0
4h-4	5/5/89	1.2	ND	3.86
4h-6	5/5/89	1.1	ND	0.29
4h-7	5/5/89	1.1	ND	0.14 ⁽³⁾
4h-8	5/5/89	1.2	ND	0.51
4h-9	5/5/89	1.1	ND	0.41
Method Detection Limit			0.16	0.16

NJDEP CUL 1-5 ug/g

(1) Method Detection Limit must be multiplied by this factor

(2) Denotes Not Detected

(3) Denotes met mass spectral identification criteria, but is below the quantitation limit

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trichloroethene (4.6 ug/g), tetrachloroethene (110 ug/g), and 1,2 dichloroethene (1.8 ug/g) (Table II-21). Hydrocarbon envelopes were detected in samples 4i-(2-4). No values were assigned to these chromatographic peaks.

TABLE II-21. VOLATILE ORGANIC COMPOUNDS DETECTED IN SOIL SAMPLES IN THE VICINITY OF THE HEAT TREAT BUILDING

Sample ID No	Dilution Factor	Compound(ug/g)			
		Methylene Chloride	1,2-Di chloroethene	Tri- chloroethene	Tetra- chloroethene
4i-2	1.1	0.64	ND	ND	ND
4i-3	1.2	0.94	ND	ND	ND
4i-4	5.1	2.30 ⁽¹⁾	1.8	4.6	110.0
Method Detection Limit		0.62	0.62	0.62	0.62

1. Boldface denotes concentration exceeds CUL of 1.0 ug/g

(2) Semi-Volatiles

Samples 4i-1 and 4i-2 were the only samples in which semi-volatile compounds were detected. 4i-1 was found to contain bis (2-ethylhexyl) phthalate (0.23 ug/g), while 4i-2 was found to contain bis (2-ethylhexyl) phthalate (2.2 ug/g) and benzo-(b)-fluoranthene (1.4 ug/g). Bis (2-ethylhexyl) phthalate was also detected in method blanks.

(3) Petroleum Hydrocarbons

Sample 4i-1 was the only sample found to contain petroleum hydrocarbons at a concentration of 90 ug/g. The CUL is for petroleum hydrocarbons is 100 ug/g.

(4) Polychlorinated Biphenyls

Aroclor 1260 was detected in 4i-1, 4i-2, and 4i-3 at concentrations of 0.59, 0.21 and 0.30 ug/g respectively. These concentrations are less than the relative standard set by the NJDEP of 1-5 ug/g.

b. Discussion of analyses

Excepting sample 4i-4, analyses in the vicinity of the Heat-Treat building did not detect compounds above the pertinent CUL. TCE and PCE was detected in sample 4i-4 at 4.6 ug/g and 110 ug/g, respectively. The CUL for total volatile organics is in soils is 1.0 ug/g.

5. PATTERN STORAGE AREA : SOILS

This area is in the southwestern portion of the property. Four samples were collected from around the pattern storage area: Three (4a-(1-3)) on the west side along the grassy strip east of Worthington Avenue, and one (4a-4) on the south side. These sample locations are described as flat, unpaved and discolored. Apparently, drums have been stored in the vicinity of sample location 4a-4. These were reported to have leaked in the past. Due to the suspected presence of underground utilities at the 4a-4 location, the deep sample (12-18") was not collected.

a. Organic Analyses

(1) Semi-Volatile Organic Compounds

Semi-volatile analyses were conducted only at sample location 4a-4. No target semi-volatile compounds were detected during analysis. However, a non-target hydrocarbon envelope was detected in this sample. No concentration value was assigned to this peak.

(2) Petroleum Hydrocarbons

Sample 4a-4 exhibited the highest concentration of petroleum hydrocarbons at 25,000 ug/g. Samples 4a-1 and 4a-3 also contain elevated concentrations of petroleum hydrocarbons. Table II-22 summarizes this data.

TABLE II-22. PETROLEUM HYDROCARBONS DETECTED IN SOILS IN THE VICINITY OF THE PATTERN STORAGE BUILDING

Sample ID No.	Date Collected	Method Detection Limit	Petroleum Hydrocarbon (ug/g)
4a-1	4/29/89	60	380.0 ⁽¹⁾
4a-2	4/29/89	60	85.0
4a-3	4/29/89	60	140.0
4a-4	4/29/89	6000	25000.0

1. Boldface denotes concentration exceeded NJDEP CUL of 100 ug/g.

(3) ~~Polychlorinated Biphenyls~~

Samples 4a-3 and 4a-4 were analyzed for PCBs. Sample 4a-3 contained no PCBs while 4a-4 was found to contain aroclor 1242 at a concentration of 190 ug/g. The NJDEP

highest concentrations were detected in C-50 and C-51 (located in the active metals-chip storage area) of 68,000 ug/g and 48,000 ug/g respectively.

TABLE II-31. PETROLEUM HYDROCARBONS DETECTED IN SEDIMENTS COLLECTED FROM SELECTED CATCH-BASINS

Sample ID No	Date Collected	Method Detection Limit	Petroleum Hydrocarbons (ug/g)
C-28	5/5/89	600	4600.0 ⁽¹⁾
C-33	4/28/89	600	7700.0
C-34	5/5/89	1500	8800.0
C-50	5/5/89	6000	68000.0
C-51	5/5/89	3000	48000.0

1. Boldface denotes concentration exceeds NJDEP CUL of 100 ug/g.

(3) Polychlorinated Biphenyls : Sediment within Catch-Basins

The PCB aroclor 1254 was detected in catch-basins C-33 and C-34 at concentrations of 4.4 ug/g and 5.6 ug/g respectively. The NJDEP CUL for total PCB's is 1 to 5 ug/g.

b. Inorganic Analyses : Sediment

(1) PP-Metals and pH : Sediment within Catch-Basins

Table II-32 lists the concentrations of PP-metals detected in catch-basin sediments at the site. The table also lists the pH at each sample location. The pH's are typically neutral, ranging between 6.84 and 7.42.

c. RCRA Waste Classification : Sediment

Sediments removed from the catch-basins during inspections was stored a roll-off located on-site. Two samples of this composited sediment were collected for waste-classification. Extract from these samples was found to be well within the limits for EP Toxicity, not ignitable, not reactive, and pH's ranged from 7.77 to 8.38. Pesticides and herbicides were not detected. Petroleum hydrocarbons and PCB's were present, however. Table II-33 presents this data in more detail.

TABLE II-33. RCRA WASTE CLASSIFICATION OF CATCH - BASIN SEDIMENTS (6/8/89)

Analysis Type		CB # 1 Sample		CB # 1 Sample (Duplicate)	CB # 2 Sample	CB # 2 Sample (Duplicate)
		<u>Regulatory Limit (mg/l)</u>	<u>mg/l</u>	<u>mg/l</u>	<u>mg/l</u>	<u>mg/l</u>
EP Toxicity	Arsenic	5.0	ND ⁽¹⁾	ND	ND	NA ⁽²⁾
	Barium	100.0 ⁽¹⁾	0.4	0.1	0.3	NA
	Cadmium	1.0	0.022	0.016	0.019	NA
	Chromium	5.0	ND	ND	ND	NA
	Lead	5.0	ND	ND	ND	NA
	Mercury	0.2	ND	ND	ND	NA
	Selenium	1.0	ND	ND	ND	NA
	Silver	5.0	ND	ND	ND	NA
	Endrin	0.02	ND	ND	ND	NA
	Lindane	0.4	ND	ND	ND	NA
	Methoxychlor	10.0	ND	ND	ND	NA
	Toxaphene	0.5	ND	ND	ND	NA
	2, 4 - D	10.0	ND	ND	ND	NA
	Silvex	1.0	ND	ND	ND	NA
Ignitability		Not Ignitable		Not Ignitable	Not Ignitable	NA
Corrositivity		pH = 7.77		pH = 8.38	pH = 8.29	NA
Reactivity		Not Reactive ⁽³⁾		Not Reactive ⁽⁴⁾	Not Reactive ⁽⁵⁾	NA
Pesticides		ND		ND	ND	NA
Herbicides		ND		ND	ND	NA
Petroleum Hydrocarbons		7600 ug/g		NA	8600 ug/g	12000 ug/g
PCB (Aroclor 1260)		24 ug/g		NA	46 ug/g	26 ug/g
(1) Denotes Not Detected		(3) Releasable Sulfide = 140 mg/kg Releasable Cyanide = <50 mg/kg				
(2) Denotes Not Analyzed		(4) Releasable Sulfide = <50 mg/kg Releasable Cyanide = <50 mg/kg				
		(5) Releasable Sulfide = <50 mg/kg Releasable Cyanide = <50 mg/kg				

the highest petroleum hydrocarbon concentrations detected in catch-basin sediments. It is noteworthy that these are also the catch-basins that exhibit elevated levels of toluene and xylene. Petroleum hydrocarbons were detected in the three other catch-basins sampled at concentrations ranging from 4,600 to 8,800 ug/g. Volatile compounds were not present in these samples.

PCB's were detected in the two most upgradient catch-basins on-site at or slightly below the CUL concentrations. They were not detected in the downgradient catch-basins.

Metals were detected at concentrations exceeding the CUL's, with chromium, copper, and nickel being present in the highest concentrations. Metals concentrations in the catch-basins located within the metal-chip storage area exceeded concentrations in the other catch-basins by several orders of magnitude.

(2) Soils Adjacent to Catch-Basins

In the soil samples C-39 and C-40 (collected next to cracked catch-basins), elevated hydrocarbon concentrations suggest that pathways from the catch-basins to the subsurface do exist. However, metals concentrations are relatively low. At C-28, where data was generated both for the sediment within the catch basin and the soils next to the catch-basin, metals concentrations that were elevated within the catch-basin were not unduly elevated in the associated soils. These data would suggest that the metals are not especially mobile at the neutral to basic pH's of the soils and sediment.

Target volatile organic compounds were not detected in any sample with the exception methylene chloride. Freon was detected at low concentrations. Petroleum hydrocarbons were detected in excess of the CUL at most of the soil boring locations. However, concentrations were significantly elevated (greater than 1000 ug/g) at C-8, located north of the foundry, C-39 and C-40, located between buildings 3 and 4, and at C-48, located east of the heat-treat building. Sediment samples were not collected from the associated catch-basins, however, it is probable that the catch-basins are acting as a source of contaminants. Strong petroleum odors were noted at C-8 during the inspection, and apparently C-39A had no sound bottom. C-40 is located in the vicinity of an unconfirmed tank location. GPR did not confirm the presence of this tank, nor did the soil sample taken from a boring placed in the tank vicinity (B-29), exhibit any elevated petroleum hydrocarbon concentrations.

~~PCB's were also detected at locations C-48 and in the duplicate sample at C-39 at relatively low concentrations. The highest PCB concentrations were detected at C-28 and C-32, located south of Building 3 and south of Building 4 respectively. Concentrations at these locations exceed the CUL of 1-5 ug/g. PCB's were not detected~~

TABLE II-45. ~~PCB ANALYSIS OF SAMPLES COLLECTED AT THE TRANSFORMER LOCATIONS~~

Sample ID No	Date Collected	Dilution Factor ⁽¹⁾	Aroclor 1260 (ug/g)
1a-1	5/5/89	1.2	34 ⁽²⁾
1a-2	5/5/89	60	210
1b-2 (0-6")	5/5/89	1.1	.085 ⁽³⁾
1b-2 (12-18")	5/5/89	1.1	.21
1b-3 (0-6")	5/5/89	1.1	.39
1b-3 (12-18")	5/5/89	5.5	1.1
1b-4 (0-6")	5/5/89	5.5	2.2
1b-4 (12-18")	5/5/89	5.5	1.4
Method Detection Limit			.16
NJDEP CUL = 1 ug/g - 5 ug/g			

⁽¹⁾ MDL must be increased by the amount

⁽²⁾ Bold type denotes concentration exceeds NJDEP CUL range

⁽³⁾ Denotes concentration met mass spectral identification criteria, but is below quantitation limit.

c. Discussion

(1) Main Substation

Petroleum hydrocarbons were detected at sample location 1b-4, but at concentrations below the CUL for petroleum hydrocarbon (100 ug/g). PHC concentrations that exceeded the CUL were detected at sample 1b-2 (12-18"). However, the shallow sample (1b-2 0-6") did not contain any PHC. Sample location 1b-3 exceeded the CUL, with the concentration decreasing with increasing sample depth.

~~During PCB analysis of samples collected at the main substation, no PCB aroclors were detected at sample location 1b-1. The other sample locations contained PCB aroclors, but not above the CUL range (1 ug/g to 5 ug/g). Sample locations 1b-2 and 1b-3 exhibited an increase in concentration with sample depth, while sample location 1b-4 exhibited a decrease in concentration with increasing sample depth.~~

(2) Cooling Tower Substation

Elevated concentrations of petroleum hydrocarbons were detected in samples 1a-1 and 1a-2. These concentrations were 550 ug/g and 2,400 ug/g respectively. The two sample locations were observed to have a black surface staining. Both of these concentrations exceed the CUL for petroleum hydrocarbon (100 ug/g).

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1.0 INTRODUCTION

In accordance with the requirements of the State of New Jersey Environmental Cleanup Responsibility Act (ECRA) (N.J.A.C. 7:1-3) McGraw-Edison Company (the Company) is submitting this work plan for the Dresser Industries, Inc., Worthington Pump Division/Custom Pump Site in Harrison, New Jersey. More specifically this plan is in response to NJDEP report of inspections dated August 21, 1985, August 29, 1985, September 19, 1985 and September 25, 1985 and as per NJDEP comments during the fifth inspection of the Harrison Plant on October 7, 1985. A location map and site map are presented in Figures 1 and 2.

The site is bounded by Worthington, Harrison & Ogden Avenues, and is about one quarter mile north of the Passaic River. Most of the site is either covered with buildings or pavement. However, the eastern portion of the site contains open soil areas mostly due to the presence of numerous old railroad spurs. Apparently the buildings have concrete floors, containing drains that discharge to the Passaic Valley Sewer Authority.

The plant has manufactured specialty pumps for the past eighty years and has been owned by Dresser Industries since 1985. McGraw-Edison previously owned the plant since 1979, and prior to that it was the Worthington Service Corporation.

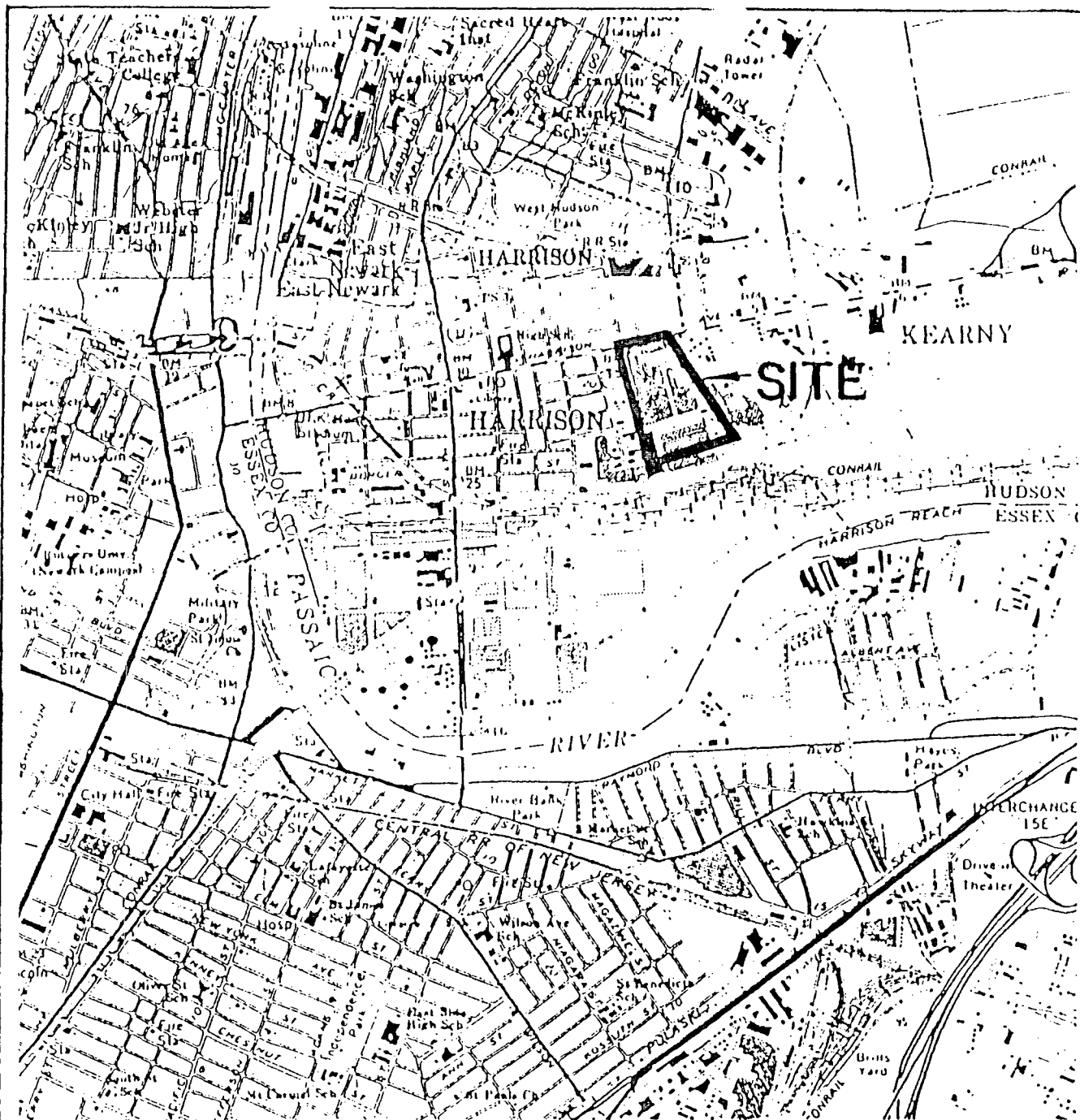
Manufacturing specialty pumps is the only operation to ever have occurred at this plant and the facility plans to continue the same operation in the future. Therefore, the Harrison plant has been generating the same types of wastes from the beginning and the disposal of the same types of wastes will be ongoing. The site covers about 23 acres, and can be divided into two areas based upon plant processes. The larger, northern portion of the site contains machine shops and related facilities. Potential environmental contaminants from this area are believed to be oils and metal fines. Lubricating and cutting oils are recycled within the plant, and perchloroethylene (PCE) is used in very small quantities as a solvent. The southern portion of the site contains an iron foundry.

~~There are approximately 16 transformers on the site. Two contain 10,000 ppm PCB and fourteen contain 50 to 80 ppm PCB. There have been no known spills of transformer oil.~~

Other than obtaining available documentation and inventory, noted deficiencies pertaining to catch basins, drainage pipes, asbestos insulation and transformers will be corrected under the clean-up phase of the ECRA program.

There are also five underground and one above ground storage tanks. The above ground tank contains No. 6 fuel oil. Three of the underground tanks contain No. 2 fuel oil, and two contain gasoline. Documentation verifying the condition of these tanks will be obtained, and the tanks will be tested for leaks prior to site investigations.

Other than possible leaking underground storage tanks, there are no underground disposal structures (i.e. septs) which may have discharged significant quantities of contaminants to the subsurface.



SCALE
2000 0 2000 FEET

FIGURE 1 SITE LOCATION MAP

PREPARED FOR
MC GRAW-EDISON COMPANY
HARRISON, NEW JERSEY

DYNAMAC CORP.
ENVIRONMENTAL RISK
MANAGEMENT DIVISION
17 MARCH 1986

932520172

The following sections of the work plan detail the proposed investigation at the Harrison facility. The scope of work includes surface soil sampling, soil borings, monitoring well installations, and the collection and analyses of soil and groundwater samples. The Quality Assurance Project Plan (QAPP) for the work is presented in Attachment 1.

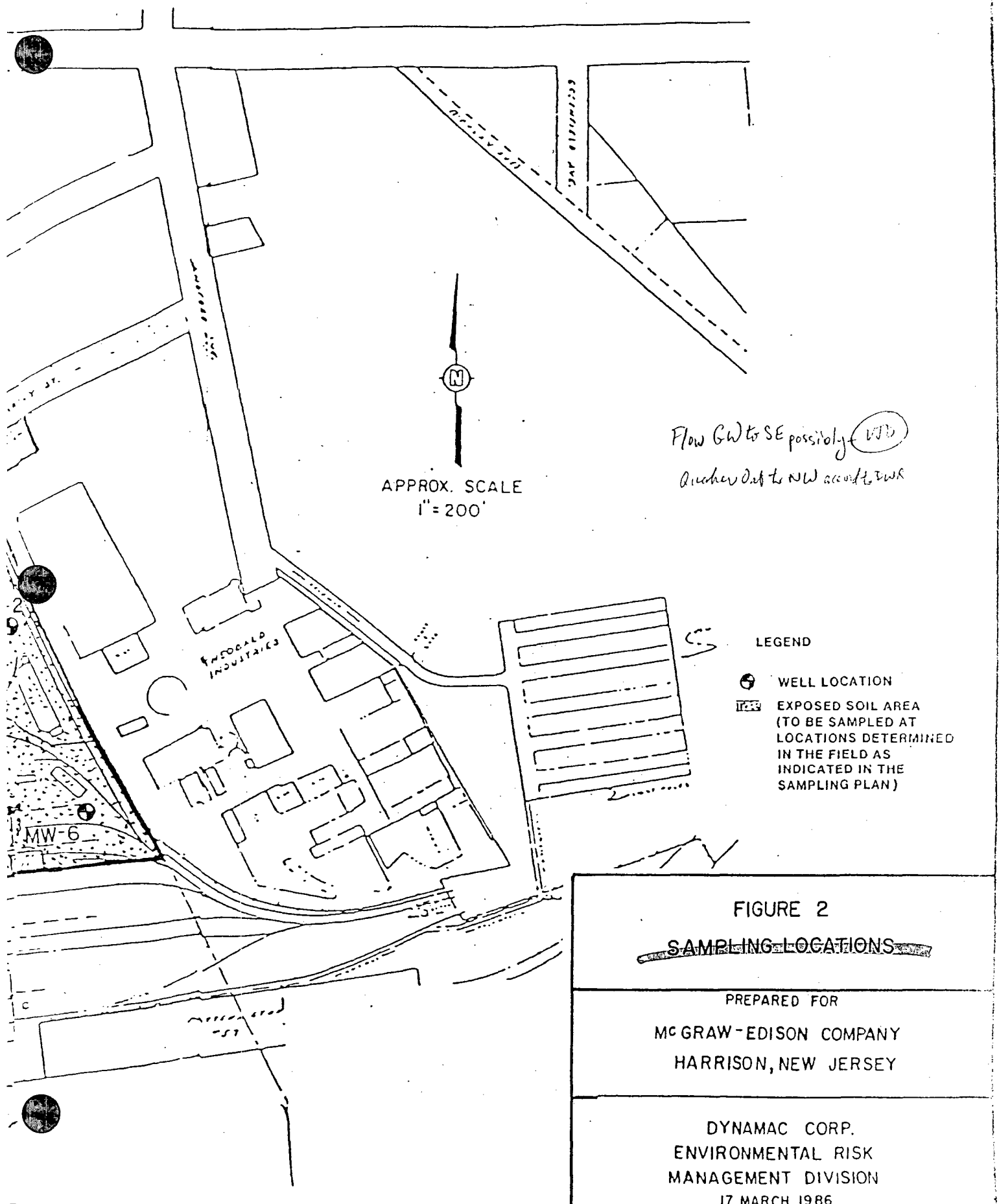
2.0 SOIL INVESTIGATION PROGRAM

2.1 Surface Soil Investigation

Extensive surface soil sampling of potential contamination will be by hand from the 0 to 6 inches depth range. Most contamination consists of small quantity oil spills and leaks on the ground surface. Surface samples will be obtained at exposed soil areas as shown on Figure 2.

Approximately 24 locations were identified as likely source areas for soil contamination. These locations include oil spills and oil stained soil, drum storage areas and scattered drums (some leakers), sludge dump and scrap piles, etc. Investigation of the extent and concentration of contaminants in the soil at each of these areas would follow a step-wise process to include:

- o Visual delineation of potentially contaminated area mostly by identifying the source (e.g. leaking drums) and marking the area of visibly discolored or oil stained soil, followed by picture documentation
- o ~~Further delineate areas to be sampled by screening techniques such as OVA M-Pacto probe and PCB field testing~~
- o Obtain clearance from plant engineer for hand digging to a depth of 1 to 2 feet (expected maximum depth of contaminant infiltration is 6 inches to 1 foot)
- o Collect one soil sample at each source area location which is less than 100 square feet in size (assume 20 locations). The sample will be taken at the perceived highest concentration or hot spot (e.g. next to leaking drum) and at a depth of from 0 to 6 inches. The hole at each sample location will be dug to a depth at which clean soil is observed or to 2 feet (which ever occurs first). The determination of clean soil will be based on visual examination, odor, and field screening procedures described earlier
- o Collect four soil samples at each source area location greater than 100 square feet but less than 400 square feet (assume 4 locations). One sample to be taken at the perceived highest concentration or hot spot location and the other three samples to be representative of the remaining portions of the contaminated area, which surrounds the hot spot. If the contaminated area extends larger than 400





square feet, one additional sample will be collected for every 400 square feet area beyond the initial 400 square feet area (assume 4 locations)

- o It is planned to conduct the surface sampling concurrently with monitoring well installation. Should obvious contamination be observed below the 1 foot level in the surface soil samples, the drilling rig used to drill the monitoring well boreholes can be used to collect soil samples from a greater depth

2.2 Soil Boring Investigation

The Company proposes to drill six soil borings to define background soil and subsurface hydrogeologic conditions at the site and investigate the existence or horizontal and vertical extent of soil contamination. Boring locations were determined on the basis of regional groundwater flow direction.

The borings will be advanced using six-inch inside diameter hollow stem augers or rotary. Three of the borings will be advanced to 50 feet for the purposes of geologic correlation. Three of the borings will be drilled to depths of 30 feet below ground surface to define depth of potential contaminant migration. Each boring will be continuously sampled (2.5 foot intervals) using a 3-inch diameter split barrel sampler. The borehole will be logged by an experienced Dynamac hydrogeologist or engineer. Soils will be described using the Unified soil classification system.

Cuttings from all borings drilled shall be collected and stockpiled on the Company property. The cuttings from all on-site borings shall be placed on an impermeable surface and will be covered by a tarp within a bermed area or they will be drummed. Final disposal of soil cuttings will be determined after the results of analytical testing of the soil samples are received.

Any drilling and monitoring well installations will be performed by a licensed well driller pursuant to N.J.S.A. 58:4A-5. All necessary permits and rights of access will be obtained prior to commencing the investigation. Utilities will be notified to identify any gas, electric, water lines, etc., which may be encountered while drilling. All field work will be supervised by an experienced Dynamac hydrogeologist/engineer.

The drill rig and all drilling equipment will be decontaminated prior to the start of drilling and between borings to minimize the potential of cross-contamination. Decontamination procedures will consist of washing with a steam cleaner and rinsing with methanol and distilled water.

3.0 MONITORING WELL INSTALLATION PROGRAM

The Company proposes to install monitoring wells in the soil borings at the Harrison facility. The location of the wells are shown in

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Figure 2. The purposes of the monitoring wells are to determine the regional groundwater quality and possible effects of major process areas (upgradient and downgradient). The monitoring wells that are expected to be mostly upgradient of the site (MW-1, 2, 3) will determine the quality of the water entering the site.

Ground water flow direction is believed to be Southeast following the ground surface contours. Depth to the water table is estimated to be approximately fifteen feet. The rationale for the well locations is presented below:

<u>WELL</u>	<u>RATIONALE</u>
MW-1 -	Upgradient background (soil and water)
-	Downgradient of potential off-site source (FEDCO)
-	Water level (gradient and flow direction)
MW-2 -	Possible upgradient for site
-	Serves as check of known off-site source of contamination (Capitol City Rendering Co.)
-	Water level (gradient and flow direction)
MW-3 -	Possible upgradient for site
-	Downgradient of potential off-site source (Campbell Foundry)
-	Water level (gradient and flow direction)
MW-4 -	Divides site into two process areas (i.e. downgradient of machine shops and upgradient of foundry)
-	Near inground concrete vault with oil in it for testing pumps
-	Water level (gradient and flow direction)
MW-5 -	Downgradient of potential source (Cupola and foundry area)
-	Water level (gradient and flow direction)
MW-6 -	Downgradient of maintenance and service areas
-	Water level (gradient and flow direction)

A typical monitoring well construction diagram is presented in Figure 3. The monitoring wells will be constructed of 4-inch nominal diameter flush joint threaded Schedule 40 PVC pipe with a 20 foot length of slotted PVC screen attached. Slot size will be 0.010 inches. All joints will be sealed with teflon thread tape. No solvents or cement will be used during monitoring well construction.

The monitoring wells will be set such that at least two feet of screen will be above the water table. The annulus around the screen will then be filled with a clean silica sand filter pack to a minimum of one foot above the top of the screen. The remainder of the borehole will be filled with a granular bentonite slurry placed with a tremie pipe. The nozzle will be placed approximately one foot above the top of the filter pack to minimize disturbance. The slurry will be displaced from the bottom upwards until it returns to the surface. The upper two feet of annular space will be filled with a

Bureau of Industrial Site Evaluation
Environmental Cleanup Responsibility Act

Report of Inspection

ECRA Case #85034

Date of Inspection 8/21/85

Inspection Category: preliminary

Inspector: Vincent DiGregorio

Industrial Establishment: McGraw-Edison Worthington Pump Division

Location: 401 Worthington Ave.
Harrison, Hudson County

Individuals Involved: Bill Dukette, Plant Manager, McGraw-Edison
Richard Dorrlor, Dynamac Corp.

NARRATIVE DESCRIPTION

Arrived on this 23 acre site at 10:00 am and proceeded to inspect this facility which is a pump manufacturing plant. Historically the facility has been in operation since 1902. Heat is provided by a central oil tank which is then piped to each building. Water is from city water, though there are two wells on the property.

All the buildings are cement floored. Wherever drains exist they are connected to the city sanitary sewers. Storm drains are also connected to the city sanitary sewers.

The first building on the site is the rough machinery finishing and wip shop building. There are no drains here and the walls have recently been coated in a cellulose insulation. An uncapped drain pipe was found here near column A28. The upper gallery of Building 1, also was free of concerns.

Building 2 had numerous steam pipes insulated with frayed asbestos, especially near column C1. A washing station where a strong base is used to wash machine parts. There is a floor drain here which receives the wash water. The floor of building 2 is coated in oil and solvent drippings.

Building 3 houses a concrete test reservoir which uses city water and recirculates the water for use in testing pumps. A fluorescent penetrant dye is also used in this building to check for surface cracks.

Radioisotopes are used in Building 3 for x-raying of metal parts for internal cracks. The isotopes used are cobalt and iridium. Spent material is reportedly removed by Tekops, Inc.

Building 3 also has metal plates in the floor through which probing revealed an accumulation of water and a sandy bottom near column C38/B38. There are open pipes near column D5. An underground steam tunnel exists here which has steam lines covered in asbestos.

~~An exterior investigation of Building 1 found a transformer on a cement pad. This transformer contains PCBs and there was oil absorptive drierite on the cement pad. Ceramic roof granules also coated the ground in this area.~~

Outside Building 2 is an untested underground #2 fuel oil tank.

Outside Building 3 were located cement pads that at one time were used for storage of various materials. There is open soil in this area. In a pipe containment area there are numerous cracks in the asphalt which reveal soil as well. Nearby is a dumpster with several oil stains on the asphalt.

Along the south side of this building are unidentified 3" pipes near column 46. At the corner of Building 3, outside the radiation section there was a sump pump discharge pipe.

Between Building 1 and the blacksmith shop (or heat treatment shop) there were white stains in the soil and scrap metal litter.

DEFICIENCIES NOTED

1. Unidentified drainage pipes throughout facility.
2. Frayed asbestos insulation throughout facility.
3. Floor drains receive oil and solvent drippings.
4. Sand and grit accumulating in troughs under metal floor plates.
5. ~~Oil spill from a transformer containing PGB's.~~
6. Untested underground fuel oil tank.
7. Sump Pump discharging to exterior of building.
8. Unidentified white liquid stains and scrap metal in soil between building 1 and the blacksmith shop.
9. Oil stains near dumpster in the pipe containment area.
10. Unreported radioactive substances on site.

ACTIONS REQUIRED ON THE PART OF THE APPLICANT

1. Submit Sampling Plan according to N.J.A.C. 7:1-3.7(d)14, submitted in triplicate to address the following areas of environmental concern:
 - a. stained soil between building 1 and the blacksmith shop.
 - b. area receiving discharge from sump pump outside building 3.
 - c. sand and grit in troughs under metal floor plates.
 - d. transformer area.
 - e. pipe containment area.
 - f. untested underground fuel oil tank.
2. The applicant must submit a site plan indicating location of all water supply and drainage lines, location of all wells, reservoirs, and circulation systems, all storm drain emission points and proof of connection to city sanitary sewers.
3. All open unidentified pipes must be identified as to use and destination and then capped.
4. Frayed asbestos insulation throughout facility must be contained or removed, depending on state of disrepair. Proper removal and disposal must be documented to this office.
5. Document and identify use of all radioactive substances on-site.

Inspector/Case Manager Signature

Vincent DiGregorio

Approved: *[Signature]*, Assistant Chief
Bureau of Industrial Site Evaluation

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Betosia Corporation

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01131-A DIRECT #2
01/12/72

ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

PAGE 316

IN THOUSANDS OF POUNDS AND DOLLARS-																			
NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES FOR YEAR	SALES FOR YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	QTD 1971	YTD 1971	
ANUCLOR DIST 5460-HI SOL															00315A		1040-480-1		
ATLANTIC VARNISH RICHMOND VA				.150								.150					00187725		
ATLAS CHEM INTL ATLAS POINT DE	10.0	8.10	10.0	2.03							2.03						1001773		
BASE WYANDOTTE CARLSTADT NJ				.750								.500	.250				0021773		
BASE WYANDOTTE HACKENSACK NJ	5.00	3.00	5.00														00150345		
PARENT CUST. TOT-BASE WYANDOTTE	5.00	3.00	5.00	.750							.500	.250					10002302		
BURAY CHEMICAL NATHAN LV		.100															10003392		
FRYE PFG DES MOINE IA	100	17.4	100	.100		.100											00119290		
RELAY CO INC FARMINGDALE NJ		.400		.300						.300							10009111		
ADHESIVE BHS SAN CARLOS CA		.050															10000790		
MORGAN ADHESIVES CO STON OH	.200	.100	.200	.100	.100												10055034		
PARENT CUST. TOT-BERIS CO MINNEA	.200	.150	.200	.100	.100												00045535		
WEST BROTHERS SINKING SERGS PA				.150												.150	00273244		
WELLS GONFIRMATION NEWARK NJ		.100		.300												.300	00212335		
WILMA PRODUCTS SAREVILLE NJ				22.0								28.0			24.0		10040034		
BURDEN PEARSON IA	1000	.250		.000		.15		1.00	.05	.90			.20	.10			10010411		
H A BURDEN & SONS PHILADEL PA				.300				.300									10012007		
BRUSHING PAINT CO BALTIMORE MD		.100		2.10				.10						1.00	1.00		10012003		
BOND CHEM WEIRSDALE FLA	.500	.300	.500	.300		.300											10012406		
CORBY CORPORATION CHICAGO ILL				.100						.100							00259275		
CANACOLL PROD FARMINGDALE LI NY				.000							.400		.400				10014220		
CASTROL OILS NEWARK N J		.800		1.05		.450	.600										10014433		
CATALPITE CORP JACKSON MS				.050					.050								00113170		
CELANESE COATINGS NEWARK NJ				5.00								3.80	1.20				10014647		
CELANESE PLAS DIV NEWARK NJ		.050															10014776		
PARENT CUST. TOT-CELANESE CORP N		.050		5.00								3.80	1.20				00045926		
ALLEG SOLV CARNEGIE CARNEG PA	40.0		40.0														00107700		
ALLEG SOLV CARNEGIE CORAG PA		60.5		63.7		10.0		1.2	10.0	12.5	3.0				20.0	7.0	10002015		
ALLEG SOLV CARNEGIE PITTS PA																	10002117		
TOT P-T ALLEG SOLV CARN + POUNDS	40.0	60.5	40.0	63.7		10.0		1.2	10.0	12.5	3.0				20.0	7.0	00107700		
AMSCO SOLVENTS CINCINNATI OH	350	202	350	55.5		21.5			16.0	5.0				13.0			10005351		
TOT P-T AMSCO SOLVENTS * POUNDS	350	202	350	55.5		21.5			16.0	5.0				13.0			10005351		
BUFFALO SOLVENTS JONAHADA NY	120	98.0	120	145					25.0			30.0	30.0	30.0	30.0		10012334		
TOT P-T BUFFALO SOLV BU + POUNDS	120	98.0	120	145					25.0			30.0	30.0	30.0	30.0		10012360		

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Federated Metals

Facility Name: ~~FEDERATED METALS CO~~ ~~BRIDGEVIEW MGMT CO~~ Reporting
Year: 1993
Street : 150 ST CHARLES ST
City : NEWARK State: NJ Zip: 071050000
County : ESSEX EPA ID: NJD079320495
Mailing Address: 1160 STATE ST
Mailing City : PERTH AMBOY State: NJ Zip: 088610000
Year: 1993 Total Waste Federal Wst. RCRA Waste
Tons Generated : 59.86 57.98 57.96
Tons Shipped : 59.86 57.98 57.96
SIC Code(s):
Contact: BARRY C HARRIS Phone: 9088261800
Generator Status : Large Quantity Generator (LQG)
Storage Status : No RCRA-permitted or interim status storage
RCRA TDR Status : No on-site TDR; site has no plans to develop system
Exempt TDR Status: No on-site TDR; site has no plans to develop system

List of wastes generated by this facility:

Waste Desc.: WASTE MERCURY
EPA Waste Code(s) for this generated waste-
D009 Mercury
Tons Generated: 0.02
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
BETHLEHEM APPARATUS CO INC
HELLERTOWN, PA
System type: M019
Tons sent: 0.02 EPA ID: PAD002390961

Waste Desc.: DUST CONTAMINATED WITH LEAD AND CADMIUM
EPA Waste Code(s) for this generated waste-
D008 Lead
D006 Cadmium
Tons Generated: 0.15
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
REPUBLIC ENVIRONMENTAL SYSTEMS, INC.
HATFIELD, PA
System type: M132
Tons sent: 0.15 EPA ID: PAD085690592

Waste Desc.: FLOOR SWEEPS W/LEAD AND OIL AND CADMIUM
EPA Waste Code(s) for this generated waste-
D008 Lead
D006 Cadmium
Tons Generated: 0.10
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
REPUBLIC ENVIRONMENTAL SYSTEMS, INC.
HATFIELD, PA
System type: M132
Tons sent: 0.10 EPA ID: PAD085690592

Waste Desc.: LEAD CONTAMINATED GREASE
EPA Waste Code(s) for this generated waste-
D008 Lead
Tons Generated: 0.08
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
REPUBLIC ENVIRONMENTAL SYSTEMS, INC.
HATFIELD, PA
System type: M132
Tons sent: 0.08 EPA ID: PAD085690592

Waste Desc.: CONCRETE, RUBBLE, BRICK CONTAMINATED WITH LEAD
EPA Waste Code(s) for this generated waste-
D008 Lead
Tons Generated: 42.53
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
ENVIROSAFE SERVICES OF OHIO INC
OREGON, OH
System type: M132
Tons sent: 42.53 EPA ID: OHD045243706

Waste Desc.: LAB PACKS, XYLENE, TOLUENE, SELENIUM, CADMIUM,
EPA Waste Code(s) for this generated waste-
D008 Lead
D006 Cadmium
D010 Selenium
F005 Spent non-halogenated solvents (see 1991 Form)
F001 Spent halogenated solvents used in degreasing (see 1991 Form)
Tons Generated: 0.26
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
ENSCO INC
EL DORADO, AR
Tons sent: 0.26 EPA ID: ARD069748192

Waste Desc.: WASTE SOLID NOS 9 NA 3077 PG 111 LEAD COMPRESSOR OIL
EPA Waste Code(s) for this generated waste-
D008 Lead
Tons Generated: 7.30
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
CWM CHEMICAL SERVICES, INC.
MODEL CITY, NY
System type: M132
Tons sent: 7.30 EPA ID: NYD049836679

Waste Desc.: OIL CLEANUP FLOOR SWEEPS W/OIL
This is state-only waste (no Federal waste codes).
State waste code(s): X725 X726
Tons Generated: 1.73

Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
REPUBLIC ENVIRONMENTAL SYSTEMS, INC.
HATFIELD, PA
System type: M039
Tons sent: 1.73 EPA ID: PAD085690592

Waste Desc.: LAB PACKS (XYLENE, TOLUENE, THIOACETAMIDE, CHROMIUM METAL
FI

NES, ETHANOL)

EPA Waste Code(s) for this generated waste-

D002 Corrosive waste
D001 Ignitable waste
D007 Chromium
U218 Ethanethioamide or Thioacetamide
D008 Lead
F005 Spent non-halogenated solvents (see 1991 Form)
D018 Benzene
F003 Spent non-halogenated solvents (see 1991 Form)

Tons Generated: 0.82
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
ENSCO INC
EL DORADO, AR
System type: M039
Tons sent: 0.82 EPA ID: ARD069748192

Waste Desc.: ~~PCB DEBRIS~~

This is state-only waste (no Federal waste codes).
State waste code(s): X751
Tons Generated: 0.15
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
APTUS INCINERATION, CHEMICAL TREATMENT
COFFEYVILLE, KS
System type: M039
Tons sent: 0.15 EPA ID: KSD981506025

Waste Desc.: WOOD CONTAMINATED WITH LEAD AND CADMIUM

EPA Waste Code(s) for this generated waste-

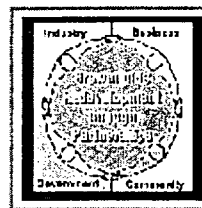
D008 Lead

Tons Generated: 6.72
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
ENSCO INC
EL DORADO, AR

Signo Trading – 1140 Thomas Street Site



Brownfields



Site Fact Sheets

1140 Thomas Street (Signo Trading Company)
Block 1183, lot 22 , Block 1184
140-170 Wilson Ave
Newark, Essex County,, New Jersey

SITE DESCRIPTION

Acreage: 4.70

The site includes a vacant four-story building formerly used for manufacturing.

SITE HISTORY

The site was owned by Morton Springer & Co. Inc. from 1982 until 1987. As a result of a 1983 fire, it was discovered that site tenants (Signo Trading International, Inc. and Enertron Industries, Inc.) had engaged in illegal storage and handling of hazardous chemicals. The fire caused chemicals to spill into the building and surroundings. The New Jersey Department of Environmental Protection (NJDEP) undertook emergency decontamination of the building. In 1987, the cost of additional sampling (after the NJDEP cleanup) was estimated at \$1 million. In May 1995, A. G. Mazzocchi, Inc. estimated the cost of demolition, removal, and disposal of the existing four story Conmar building to be approximately \$1.3 million, plus an additional \$250,000 if asbestos-containing materials (ACM) were present. The site is currently owned by the City of Newark and currently produces no tax revenue.

ZONING RESTRICTIONS

Enterprise Community/Empowerment Zone (ECEZ): No

Other: Yes

The site is located in the Newark Urban Enterprise Zone (UEZ) in the

932520191

Telecommunications:

Undetermined

SURROUNDING AREA/NEIGHBORHOOD

The property is located in the south Ironbound neighborhood, which is largely a light and heavy industrial zone but also has some residential areas. The site is located nearly adjacent to the New Jersey Turnpike between exits 15 E and 14 in a densely populated residential section with heavy truck traffic on the streets. The site is only a few miles from Newark International Airport and Port Newark.

ADJACENT PROPERTY USES**General Information:****North:**

Thomas Street

South:

Warehouse/ manufacturing/residential

East:

Welding shop/residential

West:

Residential

ENVIRONMENTAL INFORMATION**General Information:**

~~In 1986, arsenic, lead, zinc, dioxin and PCB's, were ascertained to be at levels not immediately threatening to human health, but occupancy of the building was not recommended. Warehouse use was considered possible.~~

Phase I: No

Phase II: No

Risk Assessment/Other: No

No Further Remedial Action Planned (NFRAP): Yes

See section State Activities at Site.

932520192

04/17/98 08:48:30

Crucible Steel

FIRST ENVIRONMENT

90 Riverdale Road
Riverdale, New Jersey 07457
(201) 616-9700 • FAX (201) 616-1930

Telecopy

25 11 17 AM '90

May 25, 1990

Ms. Heather Swartz
Case Manager
State of New Jersey Department of
Environmental Protection
Division of Hazardous Waste Management
CN028
401 East State Street
Trenton, New Jersey 08625-0028

Re: Remediation/Decommissioning Results
Fabco Piping, Inc.
1000 South Fourth Street
Harrison, New Jersey 07029
ECRA Case No. 88800

Dear Ms. Swartz:

Please find enclosed, three copies of our report entitled "Remediation/Decommissioning Results" for the above-referenced facility. The report responds to the items presented in your letter dated April 20, 1990, on the report of inspection of Fabco Piping, Inc. We have telecopied the text and soil sampling results on this date. At the same time we have forwarded to your office complete documents via Federal Express.

We note that shipment of the soils excavated from the railroad tanks and sediments from the concrete floor of the lean-to, as well as the small quantities of hazardous materials near the entrance to the former machine shop, is scheduled for the week of May 29, 1990. Upon receipt of the manifests, copies of the manifests will be forwarded to your office.

F:3182C/GUP001

BB6000032

932520195

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-564-0330
MARCH 28, 1989

NJ DEP Certified Drinking Water/Wastewater
Laboratory ID# 14116
US EPA Contract Laboratory

LABORATORY ANALYSIS--PRIORITY POLLUTANT PESTICIDE/PCB
GC - ELECTRON CAPTURE DETECTOR
TIER TWO DELIVERABLES

Job Number: 98102
Client: FIRST ENVIRONMENT
Sample Source: FADCO - HARRISON, N.J.
Sample ID: S-4
Sample Date: 02/13/89
Sampled By: S.S./J.V.
Lab Date: 02/13/89
Matrix: SOIL

Parameter	Result ug/kg	Method Blank ug/kg	Minimum Detection Limit ug/kg
Arochlor 1016	U	U	20
Arochlor 1221	U	U	20
Arochlor 1232	U	U	20
Arochlor 1242	U	U	20
Arochlor 1248	U	U	20
Arochlor 1254	U	U	20
Arochlor 1260	U	U	20

ug/kg = micrograms/kilogram or ppb

Results are reported on a dry weight basis.

- U: Indicates a compound was analyzed for but not detected.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

INDUSTRIAL CORROSION MANAGEMENT, Inc.
Richard Levine, President

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IM

Client: ECRACOM

Address: PARK BO WEST, PLAZA TWO, SUITE 200, SADDLE BROOK, NJ 07662

Project No.: GUYON GENERAL PIPING

Contact: LISA KAPLAN

Veritech Lab No.: 6683-84

SAMPLE NO.	RR TRACKS		EXTERIOR OF PAINT SHOP TRANSFORMER:
	6683	6684	MDL
TEST 608/PCB SCAN			
PCB-1016	ND	ND	2.5
PCB-1221	ND	ND	2.5
PCB-1232	ND	ND	2.5
PCB-1242	BMDL	ND	2.5
PCB-1248	ND	ND	2.5
PCB-1254	3.8	ND	2.5
PCB-1260	ND	ND	2.5

All Concentrations Reported As: ppm

MDL = Method Detection Limit

ND = Not Detected Above MDL

NA = Not Applicable

BMDL = Compound Is Present But Below Method Detection Limit

932520197

Client: ECRACOM

Address: PARK 80 WEST, PLAZA TWO, SUITE 200, SADDLE BROOK, NJ 07662

Project No.: GUYON GENERAL PIPING

Contact: LISA KAPLAN

Veritech Lab No.: 5660

=====

SAMPLE NO.	SAND BLASTING GRIT	
LAB NO.	5660	MDL
TEST 608/PCB SCAN		
PCB-1016	ND	
PCB-1221	ND	0.5
PCB-1232	ND	0.5
PCB-1242	ND	0.5
PCB-1248	ND	0.5
PCB-1254	1.0	0.5
PCB-1260	ND	0.5

All Concentrations Reported As: ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL
NA = Not Applicable

932520198

Client: ECRACOM

Address: PARK 80 WEST, PLAZA TWO, SUITE 200, SADDLE BROOK, NJ 07662

Project No.: GUYON GENERAL PIPING Contact: LISA KAPLAN

Veritech Lab No.: 5660

SAMPLE NO.	SAND BLASTING GRIT	
LAB NO.	5660	MDL
VERITECH/PCB/SCAN		
PCB-1016	ND	0.5
PCB-1221	ND	0.5
PCB-1232	ND	0.5
PCB-1242	ND	0.5
PCB-1248	ND	0.5
PCB-1256	1.0	0.5
PCB-1260	ND	0.5

All Concentrations Reported As: ppa
MDL = Method Detection Limit
ND = Not Detected Above MDL
NA = Not Applicable

932520199

Guyon Piping

932520201

FIRST ENVIRONMENT

50 Riverdale Road
Riverdale, New Jersey 07457
(201) 616-9700 • FAX (201) 616-1930

Telecopy

MAY 25 11 17 AM '90

May 25, 1990

Ms. Heather Swartz
Case Manager
State of New Jersey Department of
Environmental Protection
Division of Hazardous Waste Management
CN028
401 East State Street
Trenton, New Jersey 08625-0028

Re: Remediation/Decommissioning Results
Fabco Piping, Inc.
1000 South Fourth Street
Harrison, New Jersey 07029
ECRA Case No. 88800

Dear Ms. Swartz:

Please find enclosed, three copies of our report entitled "Remediation/Decommissioning Results" for the above-referenced facility. The report responds to the items presented in your letter dated April 20, 1990, on the report of inspection of Fabco Piping, Inc. We have telecopied the text and soil sampling results on this date. At the same time we have forwarded to your office complete documents via Federal Express.

We note that shipment of the soils excavated from the railroad tanks and sediments from the concrete floor of the lean-to, as well as the small quantities of hazardous materials near the entrance to the former machine shop, is scheduled for the week of May 29, 1990. Upon receipt of the manifests, copies of the manifests will be forwarded to your office.

F:3182C/GUP001

BB6000032

932520202

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-564-0330
MARCH 28, 1989

NJ DEP Certified Drinking Water/Wastewater
Laboratory ID# 14116
US EPA Contract Laboratory

LABORATORY ANALYSIS--PRIORITY POLLUTANT PESTICIDE/PCB
GC - ELECTRON CAPTURE DETECTOR
TIER TWO DELIVERABLES

Lab Number: 98102
Client: FIRST ENVIRONMENT
Sample Source: FABCO - HARRISON, N.J.
Sample ID: S-4
Sample Date: 02/13/89
Sampled By: S.S./J.V.
Lab Date: 02/13/89
Matrix: SOIL

Parameter	Result ug/kg	Method Blank ug/kg	Minimum Detection Limit ug/kg
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Arochlor 1232	U	U	20
Arochlor 1242	U	U	20
Arochlor 1248	U	U	20
Arochlor 1254	U	U	20
Arochlor 1260	U	U	20

ug/kg = micrograms/kilogram or ppb
Results are reported on a dry weight basis.

- U: Indicates a compound was analyzed for but not detected.
- J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
- U: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

INDUSTRIAL CORROSION MANAGEMENT, Inc.
Richard Levine, President

Copyright ICM, Inc., 1984. All rights reserved.

Client: ECRACOM

Address: PARK BO WEST, PLAZA TWO, SUITE 200, SADDLE BROOK, NJ 07662

Project No.: GUYON GENERAL PIPING

Contact: LISA KAPLAN

Veritech Lab No.: 6683-84

EXTERIOR OF PAINT SHOP
TRANSFORMER:

SAMPLE NO.	RR TRACKS		
LAB NO.	6683	6684	MDL
TEST 608/PCB SCAN			
PCB-1016	ND	ND	2.5
PCB-1221	ND	ND	2.5
PCB-1232	ND	ND	2.5
PCB-1242	BMDL	ND	2.5
PCB-1248	ND	ND	2.5
PCB-1254	3.8	ND	2.5
PCB-1260	ND	ND	2.5

All Concentrations Reported As: ppm

MDL = Method Detection Limit

ND = Not Detected Above MDL

NA = Not Applicable

BMDL = Compound Is Present But Below Method Detection Limit

932520204

Client: ECRACOM

Address: PARK 80 WEST, PLAZA TWO, SUITE 200, SADDLE BROOK, NJ 07662

Project No.: GUYON GENERAL PIPING Contact: LISA KAPLAN

Veritech Lab No.: 5660

=====

SAMPLE NO.	SAND BLASTING GRIT	
LAB NO.	5660	MDL
TEST 608/PCB SCAN		
PCB-1016	ND	0.5
PCB-1221	ND	0.5
PCB-1232	ND	0.5
PCB-1242	ND	0.5
PCB-1248	ND	0.5
PCB-1254	1.0	0.5
PCB-1260	ND	0.5

All Concentrations Reported As: ppm
MDL = Method Detection Limit
ND = Not Detected Above MDL
NA = Not Applicable

932520205

Client: ECRACOM

Address: PARK 80 WEST, PLAZA TWO, SUITE 200, SADDLE BROOK, NJ 07662

Project No.: GUYON GENERAL PIPING

Contact: LISA KAPLAN

Veritech Lab No.: 5660

SAMPLE
NO.

SAND BLASTING
GRIT

LAB NO.

5660

VERITECH/ECRACOM/PCB/SCAN

MDL

PCB-1016

ND

PCB-1221

ND

0.5

PCB-1232

ND

0.5

PCB-1242

ND

0.5

PCB-1248

ND

0.5

PCB-1254

1.0

0.5

PCB-1260

ND

0.5

0.5

All Concentrations Reported As: ppa
MDL = Method Detection Limit
ND = Not Detected Above MDL
NA = Not Applicable

932520206

Kester Solder

Facility Name: KESTER SOLDER Reporting Year: 1993
Street ~~C-88-FERGUSON-STREET~~
City : NEWARK State: NJ Zip: 071050000
County : ESSEX EPA ID: NJD986592129
Mailing Address: 515 E TOUHY AVE
Mailing City : DES PLAINES State: IL Zip: 600182675
Year: 1993 Total Waste Federal Wst. RCRA Waste
Tons Generated : 24.37 23.53 23.52
Tons Shipped : 24.37 23.53 23.52
SIC Code(s):
Contact: MALCOLM S WISE Phone: 7086995594
Generator Status : Large Quantity Generator (LQG)
Storage Status :
RCRA TDR Status : No on-site TDR; site has no plans to develop system
Exempt TDR Status: No on-site TDR; site has no plans to develop system

List of wastes generated by this facility:

Waste Desc.: LEAD WASTE SOLID GENERATED DURING ISRA CLEANUP ACTIVITIES
EPA Waste Code(s) for this generated waste-

D008 Lead
Tons Generated: 10.00
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
WAYNE DISPOSAL INCORPORATED
BELLEVILLE, MI
System type: M043
Tons sent: 10.00 EPA ID: MID048090633

Waste Desc.: USED/UNUSED WASTE OILS/ W LEAD GENERATED DURING ISRA
CLEANUP

EPA Waste Code(s) for this generated waste-

D008 Lead
Tons Generated: 11.47
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M099
Tons sent: 11.47 EPA ID: NYD057770109

Waste Desc.: FLAMMABLE WASTE LIQUID GENERATED DURING ISRA CLEANUP

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste
D039 Tetrachloroethylene
F001 Spent halogenated solvents used in degreasing (see 1991 Form)
F003 Spent non-halogenated solvents (see 1991 Form)
Tons Generated: 0.23
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M059

Tons sent: 0.23 EPA ID: NYD057770109

Waste Desc.: ~~PCB CONTAMINATED WATER GENERATED DURING ISRA CLEANUP~~

This is state-only waste (no Federal waste codes).

State waste code(s): X750

Tons Generated: 0.69

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

APTUS INC

ARAGONITE, UT

System type: M089

Tons sent: 0.69 EPA ID: UTD981552177

Waste Desc.: ~~PCB/LEAD CONTAMINATED RAGS GENERATED DURING ISRA CLEANUP~~

EPA Waste Code(s) for this generated waste-

D008 Lead

Tons Generated: 0.22

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

APTUS INC

ARAGONITE, UT

System type: M043

Tons sent: 0.22 EPA ID: UTD981552177

Waste Desc.: TETRACHLORETHYLENE GENERATED DURING ISRA CLEANUP

EPA Waste Code(s) for this generated waste-

F002 Spent halogenated solvents (see 1991 Form)

D039 Tetrachloroethylene

Tons Generated: 1.61

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M089

Tons sent: 1.61 EPA ID: NYD057770109

Waste Desc.: WASTE OIL CONTAMINATED ABSORBENT AND DEBRIS/ISRA CLEANUP

This is state-only waste (no Federal waste codes).

State waste code(s): X275

Tons Generated: 0.15

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M109

Tons sent: 0.15 EPA ID: NYD057770109

Chem Fleur, Inc.

- IN THOUSANDS OF POUNDS AND DOLLARS -

Q	Q	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES GOAL FOR CURR. YEAR	SALES CURR. YTD.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUSTOMER / PART CODE
		THIERNOL FR-1															0030A		1040-245-10
1130		CASCADE FIBER EUGENE ORE		.275		.165		.165											00163031
1133		CASHELL INDUSTRT ANN ARBOR MI																	00227311
1232		CELLANEOSE PLAS GREER SC		1.20	1.20							1.20							00245670
1232		CELLUCRAFT INC NEW HYDE PRK NY	2.70	1.80	2.70	2.40							2.40						00176194
1350		CENAC TOWING CO HOUMA LA	.700	4.00	.700	1.20							1.20						00226533
1170		CHAMPION PAPERS HAMILTON OH	2.00	1.80	2.00														10015308
1130		US PLYWOOD ANDERSON CALIF				.110				.110									10004946
1130		US PLYWOOD REDDING CA		.110															00240958
		PARENT CUST. TOT- U S PLYWOOD-CH	2.00	1.91	2.00	.110				.110									00047333
1130		CHAMSEUR WESTERN OIL FELLOWS C	1.00		1.00	0.40	2.40				6.00								00227018
1252		CHEN FLENN INC NEWARK NJ	.500		.500														00216550
1130		CHEMICAL PROCESSORS SEATTLE WA		3.00															00235014
1252		CITIES SERVICE CO HOUSTON TX	10.0		10.0														00221996
1133		CLAYTON CHEM CO SAUGET ILL	1.20		1.20	.600	.600												10017165
1252		COASTAL CHEM CO ADGEVILLE LA	70.0	361	70.0	174	68.9	78.0			27.0								03107186
1152		COCA COLA BOTTLING CO PLANT ME	.500	.600	.500														00224677
1252		COEN COMPANY CHERINGTON NY		2.40															00165066
1252		COEN COMPANY KINGSTON NY	20.0	6.00	20.0														00235008
1252		COEN COMPANY RAVENA NY		4.00															00100211
		PARENT CUST. TOT-COEN COMPANY RA	20.0	13.2	20.0														00100211
1252		COLD SPRING CO YARLEY PA				13.8				13.8									00255556
1252		COLLINS & AIRMAN ASHAWAY RI				3.00								3.00					00262331
1134		COLLIN RADIO CEDAR RA IA		.600															00114642
1252		CHILLOID CHEM CEDAR KNOLLS NJ				.020										.820			10017777
1252		COLORIAL SAND KINGSTON NY				10.0								3.60	7.20				00262358
1050		COLORADO OIL CO ROCK SPR WY		2.40		3.00						.60		1.20		1.20			00114683
1170		COLTRAPAC INC FRANKLYN OH	1.20		1.20	1.00		.60		1.20									10017963
1074		COMUSTION ENGINE IN TULSA OK		3.00															00243103
1130		COMMCO PASTECRIZING STOCK CA	1.00	1.00	1.00	1.20	1.20												00221544
1050		CONTAINER CORP LOS ANGELES CA		1.80															00218443
1134		CONR CORP OF AM SIOUX CITY IA	.600	.165	.600														10010575
1030		CONT CORP OF AM RENTON WA				.600								.600					10010625
		PARENT CUST. TOT-CONTAINER CORP	.600	1.97	.600	.600								.600					10010617
1274		CONTINENTAL CAN CO ROGERS ARK	1.50		1.50	1.20						1.20							00215066
1050		CONTINENTAL CAN LOS ANGELES CA				.600						.600							00252174
1130		CONTINENTAL CAN MT VERNON CH		.600															10018951

197

932520213

PSE&G Harrison Gas Plant

EPA DOCKET DATA - CASE LIST

search used- Facility: ALL
Zip: ALL
City: HARRISON
State: NJ
Level of Detail: HIGH

This search was taken from RTK NET's (the Right-To-Know Network)'s copy of EPA's DOCKET database. RTK NET is run by OMB Watch and Unison Institute at 1742 Connecticut Ave., NW, Washington DC, 20009 - Phone: 202-234-8494
The search was done on 04/16/1998.

This copy of the database was last updated on 03/30/1997.

If you don't see the words *END OF REPORT* at the end of your search, then your Web search didn't complete -- back up and try it again.

Administrative Action 02-86-0014 Case Name: CAMPBELL FOUNDRY CO. (NON)
Type: CAA NOTICE OF NONCOMPLIANCE
File Date: 06/29/1983 Conclusion Date:
Defendant: CAMPBELL FOUNDRY CO.
Law(s): CAA 120
Violation(s): State implementation plan
Pollutant(s): PARTICULATE MATTER
Facility(s):
Name : CAMPBELL FOUNDRY CO
City : HARRISON State: NJ Zip: 07029
Penalty (\$): Superfund Cost Awarded (\$):
Result: Source Agrees

Administrative Action 02-87-0202 Case Name: CAMPBELL FOUNDRY CO.
Type: CAA NOTICE OF VIOLATION
File Date: 05/05/1987 Conclusion Date: 04/20/1988
Defendant: CAMPBELL FOUNDRY CO.
Law(s): CAA 110
Violation(s): State implementation plan
Pollutant(s): PARTICULATE MATTER
Facility(s):
Name : CAMPBELL FOUNDRY CO
City : HARRISON State: NJ Zip: 07029
Penalty (\$): Superfund Cost Awarded (\$):
Result: Source Agrees

Administrative Action 02-87-0479 Case Name: ~~PSE & GAS~~
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 09/25/1987 Conclusion Date: 09/13/1988
Defendant: PUBLIC SERVICE ELECTRIC & GAS
Law(s): TSCA 6E
Violation(s): General facility requirements
Pollutant(s): ~~PCB~~
Facility(s):
Name : PSE & G CO
City : HARRISON State: NJ Zip: 07029

Penalty (\$): 8,500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-87-0574 Case Name: JOSEPH SUPOR & SON TRUCKING &
Type: CAA COMPLIANCE ORDER
File Date: 02/23/1988 Conclusion Date:
Defendant: JOSEPH SUPOR & SON TRUCKING &
Law(s): CAA 112
Violation(s): National Emission Standard for Hazardous Air Pollutant
Pollutant(s): ASBESTOS
Facility(s):
Name : JOSEPH SUPOR & SON TRUCKING
City : HARRISON State: NJ Zip: 07029
Penalty (\$): Superfund Cost Awarded (\$):
Result: Source Agrees

Administrative Action 02-88-0782 Case Name: DRIVER HARRIS ALLOYS
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 09/26/1984 Conclusion Date: 06/14/1985
Defendant: DRIVER HARRIS ALLOYS
Law(s): TSCA 6E
Violation(s): General facility requirements
Pollutant(s): PCB
Facility(s):
Name : DRIVER HARRIS CO
City : HARRISON State: NJ Zip: 07029
Penalty (\$): 8,500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-91-0068 Case Name: HARRISON BAKING
Type: CAA COMPLIANCE ORDER
File Date: 02/21/1991 Conclusion Date: 09/20/1991
Defendant: HARRISON BAKING
Law(s): CAA 114
Violation(s): CAA/114 (Info)
Pollutant(s): VOLATILE ORGANIC COMPOUND
Facility(s):
Name : HARRISON BAKING CO INC
City : HARRISON State: NJ Zip: 07029
Penalty (\$): Superfund Cost Awarded (\$):
Result: Source Agrees

Administrative Action 02-92-0074 Case Name: DRIVER-HARRIS ALLOYS INC
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 03/23/1992 Conclusion Date: 06/25/1992
Defendant: DRIVER-HARRIS ALLOYS INC
Law(s): TSCA 6E
Violation(s): General facility requirements
Pollutant(s): PCB

932520217

HARRISON, NJ 07029

Record Type: NCDB System ID: D02#PCB-92-0128
Facility Name: DRIVER-HARRIS ALLOYS INC
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029

Record Type: NCDB System ID: I02#199201091075 1
Facility Name: HARRISON ALLOYS
Address: 308 MIDDLESEX AVE.
HARRISON, NJ 07029

Facility Name: HARRISON GAS PLT
Address: FRANK E RODGERS BLVD
HARRISON, NJ 07029
EPA ID: NJD000768028 EPA Region: 02 County Code: 017

List of alias records for this facility follows:

Record Type: RCRIS System ID: NJD000768028
Facility Name: HARRISON GAS PLANT
Address: FOURTH ST
HARRISON, NJ 07029
Comments: STREET NAME CHANGED FROM
FOURTH ST

Record Type: AFS System ID: 3401700177
Facility Name: P S E & G HARRISON GAS PLANT
Address: 200 FRANK E. RODGERS BLVD.
HARRISON, NJ 07029
SICs: 4911

Record Type: PADS System ID: NJD000768028
Facility Name: HARRISON GAS PLANT
Address: FRANK E RODGERS BLVD
HARRISON, NJ 07029
Comments: STREET NAME CHANGED FROM
FOURTH ST

D&B Number: 157408329

932520218

Facility Name: PSE&G-HARRISON GAS PLANT Reporting Year: 1997
Street : 2000 FRANK E RODGERS BLVD
City : HARRISON State: NJ Zip: 070290000
County : HUDSON EPA ID: NJD000768028
Mailing Address: 2000 FRANK E RODGERS BLVD
Mailing City : HARRISON State: NJ Zip: 070290000
Year: 1997 Total Waste Federal Wst. RCRA Waste
Tons Generated : 208.52 208.52 208.51
Tons Shipped : 208.52 208.52 0.00
SIC Code(s):
Contact: WILLIAM H STEPHENSON Phone: 9734307129-7129
Generator Status : Large Quantity Generator (LQG)
Storage Status : No RCRA-permitted or interim status storage
RCRA TDR Status : No on-site TDR; site has no plans to develop system
Exempt TDR Status:

List of wastes generated by this facility:

Waste Desc.: HAZARDOUS WASTE LIQUID N.O.S.-PETROLEUM DISTILLATES

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste

Tons Generated: 1.22

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CLEAN HARBORS SVCS INC

CHICAGO, IL

System type: Transfer Facility Storage

Tons sent: 1.22 EPA ID: ILD000608471

Waste Desc.: TANK DECOMMISSIONING-HAZARDOUS WASTE LIQUID, BENZENE

EPA Waste Code(s) for this generated waste-

D018 Benzene

Tons Generated: 0.12

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CLEAN HARBORS SVCS INC

CHICAGO, IL

System type: Transfer Facility Storage

Tons sent: 0.12 EPA ID: ILD000608471

Waste Desc.: HAZARDOUS WASTE SOLID N.O.S. (LEAD)

EPA Waste Code(s) for this generated waste-

D008 Lead

Tons Generated: 6.78

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CWM CHEMICAL SERVICES, L.L.C.

MODEL CITY, NY

System type: Landfill - Disposal

Tons sent: 6.78 EPA ID: NYD049836679

~~Waste Desc.: HAZARDOUS WASTE SOLID, N.O.S. (LEAD, PCB)~~

EPA Waste Code(s) for this generated waste-

D008 Lead

Tons Generated: 8.00

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CWM CHEMICAL SERVICES, L.L.C.

MODEL CITY, NY

System type: Landfill - Disposal

Tons sent: 8.00 EPA ID: NYD049836679

Waste Desc.: HAZARDOUS WASTE SOLID N.O.S.-BENZENE

EPA Waste Code(s) for this generated waste-

D018 Benzene

Tons Generated: 192.40

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CLEAN HARBORS OF BALTIMORE INC

BALTIMORE, MD

System type: Transfer Facility Storage

Tons sent: 192.40 EPA ID: MDD980555189

AC Transformers

1972

NEWARK
ESSEX COUNTY
DIRECTORY
OF
BUSINESS

Greater Newark Chamber of Commerce

NEWARK, NEW JERSEY

932520223

COUNSELING & CONSULTING

CANDEUB, FLEISSIG AND ASSOCIATES, 11 Hill Street, Newark, 07102, Essex County, 643-3919

FAMILY SERVICE BUREAU, 15 Fulton Street, Newark, 07102, Essex County, 642-7790

HUBERT ENTERPRISES INC., 1180 Raymond Blvd., Newark, 07102, Essex County, 624-7033

MALONEY & CURCIO INC., 319-335 Wilson Avenue, Newark, 07105, Essex County, 589-0190

METZLER ASSOCIATES, 605 Broad Street, Newark, 07102, Essex County, 622-8315

SKEIST LABORATORIES, INC., 112 Naylor Ave., Livingston, 07039, Essex County, 994-1050

SMALL BUSINESS ADMINISTRATION, 970 Broad Street, Room 1635, Newark, 07102, Essex County, 645-2434

STERN, THEODORE, 129 Chancellor Ave., Newark, Essex County, 926-6233

DAIRY PRODUCTS

SIC 2021, 26

ABBOTT DAIRIES INC., Div. of: Fairmont Food, 369 Raymond Blvd., Newark, 07105, Essex County, 589-0136

APPLGATE FARM, INC., 616 Grove St., Upper Montclair, 07043, Essex County, 744-5900

CLINTON MILK CO., 353 Morris Ave., Newark, 07103, Essex County, 242-1333

COLUMBIA CHEESE CO., 158 Miller Street, Newark, 07114, Essex County, 243-5513

DOUELLE ICE CREAM CO., 501 Central Ave., Orange, 07050, Essex County, 674-2586

DAIRYLEA CO-OP INC., 174 Maple Ave., Wallington, 07055, New Jersey 778-7722

GOOD HUMOR CORP., Div. of: Thomas J. Kipton, Inc., 40 New Dutch Lane, Fairfield, Essex County, 227-6430

WIS. THOMAS T. & SONS, INC., 260 Liberty Street, Bloomfield, 07003, Essex County, 748-1928

WIRTH JERSEY DAIRYLAND, INC., 487 Chancellor Avenue, Irvington, 07111, Essex County, 923-4000

WIRTHFIELD CHEESE COMPANY, Sub. of: Lane-Miller Corp., 108-116 Sylvan Avenue, Newark, 7104, Essex County, 482-9119

K POINT DAIRIES OF NEW JERSEY, 120-128 Dime Street, Newark, 07105, Essex County, 14-3400

LSH FARMS ICE CREAM INC., Fairfield Ave. & Essex Ave., West Caldwell, Essex County

DRUGS & PHARMACEUTICALS

SIC 2831, 33, 34

AMERICAN VITAMIN PRODUCTS, INC., Vitamin Division, 360 Elizabeth Ave., Newark, 12-12-12, Essex County, 248-6070

ECH. AL CO., 280 Chestnut Street, Newark, 07105, Essex County, 589-8181

ENCAPSULATIONS, INC., 288 Chestnut Street, Newark, 07105, Essex County, 589-5665

FARADAY LABORATORIES, INC., 223 High Street, Newark, 07102, Essex County, 621-8414

FX-LAB CO., INC., 77 Okner Parkway, Livingston, 07039, Essex County, 992-5550

HOFFMANN LA ROCHE INC., 340 Kingsland Road, Nutley, 07110, Essex County, 235-5000

IVERS LEE, Div. of: Becton Dickinson & Co., 147 Clinton Road, Fairfield, 07006, Essex County, 228-0580

IVERS-LEE, Div. of: Becton Dickinson & Company, 147 Clinton Rd., West Caldwell, 07006, Essex County

KEMWORTH LABORATORIES INC., 554 Mitchell St., Orange, 07050, Essex County, 674-4770

KNOLL PHARMACEUTICAL CO., 377 Crane Street, Orange, 07050, Essex County, 673-0474

ORGANON INC., 375 Mount Pleasant Avenue, West Orange, 07052, Essex County, 731-6000

PENICK, S.B. & COMPANY, Unit of CPC International, Inc., 215 Watchung Avenue, Orange, 07050, Essex County, 673-1335

PENICK, S.B. & COMPANY, Sub. of: CPC International, 158 Mount Olivet Avenue, Newark, 07114, Essex County, 243-4662

PENNWALT CORP., 91 South Harrison Street, Newark, 07019, Essex County, 678-9000

SCHERING CORPORATION, Div. of: Schering Laboratories; Pharmaco, Inc.; Animal Health; Diagnostics, 60 Orange Street, Bloomfield, 07003, Essex County, 743-6000

SUN CHEMICAL CORP., 185 Foundry St., Newark, 07105, Essex County, 344-4879

SYCCO INC., 22 E. Willow St., Millburn, 07041, Essex County

UNETTE CORPORATION, 26 Okner Parkway, Livingston, 07039, Essex County, 992-3800

UNIT PACK CO., INC., 220 Little Falls Road, Cedar Grove, 07009, Essex County, 239-4112

UNITRADE PACKAGING CORP., 29 Commerce Court, Verona, 07044, Essex County, 857-0330

VAPON, INC., 23 Fairfield Place, West Caldwell, 07006, Essex County, 228-1990

DRUMS - STEEL

SIC 3491

ALBERT STEEL DRUM CO., INC., 320 South St., Newark, 07114, Essex County, 622-4299

BAYONNE BARREL & DRUM CO., U.S. Highway No. 1 and Raymond Boulevard, Newark, 07105, Essex County, 589-0110

CENTRAL STEEL DRUM CO., 704 Doremus Avenue, Newark, 07105, Essex County, 621-8500

GOLD COOPERAGE, INC., Div. of: Prospect Industries Corporation, 401 South Street, Newark, 07105, Essex County, 642-7600

DYEING & FINISHING OF TEXTILES

SIC 2261, 62, 69

ABACO FABRICS CORP., Sub. of: Reeves Brothers Inc., 5 Lawrence St., Bloomfield, 07003, Essex County, 748-3333

ESSEX DYEING CO., LTD., 56 East Bigelow Street, Newark, 07114, Essex County, 248-3035

RAY LEATHER CO., 831 Broadway, Newark, 07104, Essex County, 482-1015

WINDSOR CLEANERS INC., 660 Springfield Ave., Newark, 07103, Essex County, 371-0700

ELECTRICAL CONTRACTORS

SIC 1731

BROADWAY MAINTENANCE CORP., 1271 Mc Carter Hwy., Newark, 07104, Essex County, 484-1100

DE SESA ENG. CO., 18 Ropes Place, Newark, 07107, Essex County, 484-0300

FLUORO ELECTRIC CORPORATION, Sub. of: Universal Container Corp., 573 Ferry Street, Newark, 07105, Essex County, 623-7400

JAEHNIG, PAUL H. INC., 320 Mt. Pleasant Ave., Newark, 07104, Essex County, 484-7262

JARVIS, ERNEST & CO., 78 Empire St., Newark, 07114, Essex County, 201-242-4321

REYNOLDS ELECTRIC CO., 608 Broadway, Newark, Essex County, 485-0500

VALENTINE ELECTRIC CO., INC., 826 N. 6th Street, Newark, 07107, Essex County, 484-7300

WESTERN ELECTRIC CO., 22 Broadway R. 2132, New York, 10038, New York 571-2345 Ext. 2

ELECTRICAL EQUIPMENT - INDUSTRIAL

SIC 3600 - 29

A C TRANSFORMER CORP., 89 Madison St., Newark, 07105, Essex County, 589-8574

AMARIKA, INC., Sub. of: Yardney Electric Co., 377 Fifth St., Newark, 07107, Essex County, 484-2400

AREO PRODUCTS CO., INC., 21 North Eighth Street, Belleville, 07109, Essex County, 759-0959

B.K. ELECTRICAL PRODUCTS, INC., 35 Ashland Avenue, West Orange, 07052, Essex County, 731-7212

BAR-LO CARBON PRODUCTS INC., 120 Main Street rear, Orange, 07050, Essex County, 673-1300

BECKMAN INSTRUMENTS, INC., Cedar Grove Operations, 89 Commerce Road, Cedar Grove, 07009, Essex County, 239-6200

BRIN MFG. CO., INC., 109 Albert Avenue, Newark, 07105, Essex County, 622-6063

CONTINENTAL ELECTRIC CO., INC., 323-27 Ferry Street, Newark, 07105, Essex County, 642-4051

DUMONT OSCILLOSCOPE LABS, INC., 40 Fairfield Place, West Caldwell, 07006, Essex County, 228-3665

ELECTRICAL PRODUCTS DIVISION, Midland-Ross Corp., 530 W. Mt. Pleasant Ave., Livingston, 07039, Essex County, 992-8400

ELECTRO RUST-PROOFING WALLACE & TIERNAN DIV., Div. of: Pennwalt Corp., 25 Main Street, Belleville, 07109, Essex County, 759-8000

ELECTRONIC BRAZING CO., INC., 140 Glenridge Avenue, Montclair, 07042, Essex County, 744-2150

EMMONS INDUSTRIES, 455 Cortlandt Street, Belleville, 07109, Essex County, 751-3300

FEDERAL PACIFIC ELECTRIC CO., 150 Avenue L, Newark, 07101, Essex

*Original of
the*

THE REFERENC
NEWARK, N.J.



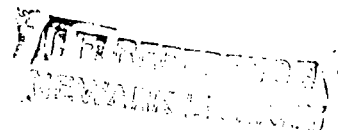
NEWARK INDUSTRIAL DIRECTORY 1964



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NEWARK INDUSTRIAL DIRECTORY

1964



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SECTION IMANUFACTURERS

A. C. Transformer Corporation 89 Madison Street, Newark 642-7574	Alexander C. Greyson, President	Electrical Transformer (custom made)
A & R Cabinets & Millwork, Inc. 20 Shipman Street, Newark 622-0235	Joseph M. Reyes President	Kitchen cabinets, Formica, Laminating, custom work, etc.
Abbott Clark Machine & Tool, Inc. 52 Edison Place, Newark 623-2795	Marvin H. Millush President	Automatic drilling machines, feeders, packaging equipment; electronic parts and sub assemblies
Ace Drill Bushing Co. Eastern Div. 611 McCarter Highway, Newark 642-3006	Charles Hugh Branch Manager	Drill jig bushings
Ace Tool & Manufacturing Co. 532 Mulberry Street, Newark 243-6375; 243-6376	LeRoy D. Kolarsick Partner	Plastic molds, tools, dies, fixtures and light machinery
Ace Uniform Company 126 Market Street, Newark 622-2211	Irving Grossman Sales Manager	All kinds of uniforms
Acme Machine Company 80 Miller Street, Newark 243-3313	S. A. Hansen Owner	Small parts in molybdenum for the electronic industry
Acme Metal Goods Mfg. Co. 2 Orange Street, Newark 623-0725	Charles Fischer President	Kitchenware specialties, metal stampings, etc.
Acme Plating Works 118 Academy Street, Newark 622-5187	Frank P. Travisano President	General plating, precious metals, precision plating, special finishing complete products
Acme Quality Paints, Inc. 560 Broad Street, Newark 623-4200	R. J. Hardie Sales Manager	Paints, varnishes, lacquers
Acme Sheet Metal Works, Inc. 309 Norfolk Street, Newark 642-0211	David Gen President	Sheet metal contracting
Acme Wire Works 216 Oraton Street, Newark 482-1938	Peter D'Amato Owner	Wire mesh products - window guards, wire mesh partitions folding gates



NEWARK INDUSTRIAL DIRECTORY 1960

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NEWARK INDUSTRIAL DIRECTORY

1960

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NEWARK ASSOCIATION OF
COMMERCE AND INDUSTRY

932520229

SECTION I

MANUFACTURERS

AAA Casting & Pattern Co. 270 Thomas Street, Newark Mitchell 3-4664	Vincent Vitollo	Castings, aluminum & bronze; outside lights and aluminum pipe fittings
A C Transformer Corporation 89 Madison Street, Newark Mitchell 2-7574	Alexander C. Greyson, Pres.	Electrical transformers
Ace Drill Bushing Co.-Eastern Div., 611 McCarter Highway Newark - Mitchell 2-3006	Charles Hughes Branch Mgr.	Drill jig bushings
Ace Tool & Manufacturing Co. 532 Mulberry Street, Newark Bigelow 3-6375	Carl W. Kolarsick Partner	Plastic molds, tools, dies, jigs, fixtures and light machinery
Ace Uniform Company 126 Market Street, Newark Market 2-2211	Irving Grossman Sales Manager	All kinds of uniforms
Acme Machine Company 80 Miller Street, Newark Bigelow 3-3313	S. A. Hansen Owner	Small parts in Molybdenum for the electronic industry
Acme Metal Goods Mfg. Co. 2 Orange Street, Newark Market 3-0725	Charles Fischer President	Kitchenware specialties, metal stampings, etc.
Acme Quality Paints, Inc. 560 Broad Street, Newark Market 3-4200	J. R. Nuber, Jr. C. T. Nesbit Sales Managers	Paints, varnishes, lacquers
Acme Sheet Metal Co., Inc. 309 Norfolk Street, Newark Mitchell 2-0211	David Gen	Sheet metal contracting
Acme Wire Works 216 Oraton Street, Newark Humboldt 2-1938	Peter D'Amato Owner	Wire mesh products - window guards, wire mesh partitions folding gates
Addressograph-Multigraph Corp. 1060 Broad Street, Newark Mitchell 2-5780	Ray L. Greene, Mgr. Addressograph Div. J. C. Rosler, Jr. Mgr. Multigraph Div.	Addressograph, multilith, multigraph, Speedamat machines, supplies and services
Aetna Steel Products Corp. 605 Broad Street, Newark Market 4-7198	James G. Robinson Manager, N.J.	Metal and glass office partitions

Driver Harris Company

61131-A DIRECT #2
01/12/72

ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

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IN THOUSANDS OF POUNDS AND DOLLARS-																			
Q.	Q.	NAME OF PRODUCT/CUSTOMER	POTENTIAL	1971 YEAR SALES	1970 YEAR SALES	1969 YEAR SALES	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUSTOMER / MATERIAL QTY.
		OS 135															005	2A	6780-000-1
1122		WESTINGHOUSE PITTSBURGH PA	.002	.002	.002														10099743
		TOTAL PRODUCT * * * * *	.009	.013	.003	.024	.001		.002	.007		.004	.002				.002	.006	6780-000-1
		SANTOVAC 1															018	6A	6776-001-1
1124		ASHLAND CHEM CO MAPLETON IL				2.80			1.20		1.20								10008819
1125		STANLEY MUSKOGEE MUSKOGEE MI				3.00			1.20			.60							10013929
1126		LOUISIANA ELIZABETH KY				2.80					2.40								00218308
1127		COJICILE STEEL SYRACUSE NY				1.20			1.20										10020381
1128		UNIVERSAL CYCLES ST. J. ILL				1.20	1.20												00226656
1129		DRIVER MARKS CO HARTFORD CT	1.00		1.00	.600					.600								10023262
1130		COLEMAN HIGH VACUUM GRAND ILL																	00117412
1131		GENERAL MILLS KANKAKEE ILL				6.00	2.40		2.40										10022229
1132		HEMET CORP COVER NJ				3.60							1.20				.60	1.00	00251976
1133		KENNEL METAL WINDSOR CT		.300															10043340
1134		KONTI-PLASTICS EVANVILLE IN				.600													10043448
1135		MINN MIN & CO GUIN AL				.350												.330	00271973
1136		ROBERTSON CONTROL MILFORD CT				.275	.055			.110								.110	00136239
1137		TAM INC MINERVA OH	15.0	3.00	10.0	7.20			3.00	3.00						1.20			00141267
		TOTAL PRODUCT * * * * *	16.0	3.60	11.0	31.2	3.60		6.60	5.51	4.20	.60	1.20	2.40	1.80	2.40	.60	2.24	5776-001-1
		SANTOVAC 2															018	5A	6776-002-1
		CUSTOMER ID NOT IN MASTER FILE				.120						.120							00257201
1138		ADAMS CARBIDE LIVONIA MI				.080									.060				00265616
1139		AERO CAST INC MIAMI FL				.540							.300					.240	00261504
1140		AEROSPACE SUPPLY FORT WORTH TX				.300												.300	00272043
1141		AERO SPACE SUPPLY HURST TX				.100	.180												00248711
1142		AIRCRAFT CASTING MIAMI FL				.060			.060										00251763
1143		AIRCRAFT SERVICE MIAMI FLA				.060		.060											00097819
1144		ALLEGHENY LUMBER BRACKENRIDGE PA				.240									.120	.120			00165437
1145		ALPHA METALS JERSEY CITY NJ				.060			.060										10002729
1146		ALUMINUM FINISHING CRONELL CT				.120							.060	.060					00252549
1147		AMT CORP TROY MI				.120			.060										00253419
1148		AMERICAN LINE HAST ON HUD NY				.120									.60			1.20	10005537
1149		AMCO PAINT & CHEM DETROIT MI				.060						.060							00257429
1150		AMCO STEEL BALTIMORE MD				.300					.300								00255427
1151		AMCO INC ARNOLD AFB STA IN				1.92				1.92									10006619
1152		AMCO CORP CITY OF INDUST CA				.600											.600		00270052
1153		AMCO CHEM-NUMEC LEESBURGH PA				.120	.060				.060								00246417
1154		AMCO CASSET CO AMMAN IN				.060									.060				00265202
1155		AMCOVILLE CASSET BALTIMORE IN				.120						.600						.600	00259241

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01131-A DIRECT #2
01/12/72ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

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- IN THOUSANDS OF DOLLARS -

Q	RS	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES QUOTA FOR CURR YEAR	SALES CURR YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST ID / MFG GID GP
		PRODUCOR 1242															003598		1040-240-1
1233		AMERICAN STEEL FOUND GRANT C IL		6.00															10000727
1234		BARNES G TUCKER CARRIST PA		6.00															00227710
1235		R P CARGILLE CEDAR GROVE NJ		10.2															1001111
1236		DAYTON MALLEABLE IRON IRON OH		6.00															10021227
1237		NEW CHEMICAL RUSSELLVILLE ARK		6.20															00180729
1238		LOS ANGELES DIE LOS ANGELES CA		1.20															00127706
1239		STEEL CHEMICAL CO CHISON NJ		14.4															10000676
1240		STATE CASH REGIS DAYTON OH	2500		2500														10000349
1241		RADIATOR SPECIAL CHARLOTTE NC	300	310	300														10000908
1242		U S STEEL H HESTER PA		110															10000349
1243		WESTINGHOUSE AT HILBERG PA		9.59															10000115
1244		WESTVAC COUP DUVINCH VA		1.20															10000505
1245		WYNN OIL CO AZUSA CALIFORNIA		6.00															10002634
		TOTAL PRODUCT * * * * * LB	2800	321	2800														1040-240-1
		PRODUCOR 1248															003568		1040-260-1
1231		ALLIED CHEM MOUNDSVILLE WV		6.00															10002443
1232		AMAX SPECITY HTL ARRON NY		6.00															00221852
1233		AMAX SPECITY HTL WASHINGTON WV		3.00															00207694
		PARENT CUST. TOT-AMAX SPECITY HT		3.60															00227862
1234		AMER AND CHEM CO MAPLETON IL		1.20															10000813
1235		ATLANTIC RICHFIELD E CHIC IN		12.0															10073109
1236		BELRAY CO INC PARKTOWALE NJ		53.4															10009111
1237		COOR C USS LAB R HOLLYWOOD CA		6.00															00180057
1238		CITIES SERVICE OIL PETTYS ISNO		36.0															00222531
1239		CRUCIBLE STEEL SYRACUSE NY		1.20															10020017
1240		DIAMOND CHAIN INDIANAPOLIS INO		230															00223093
1241		DRIVER-HARRIS CO HARRISON NJ		1.20															10023262
1242		L I DU PONT NIAGARA FALLS NY		7.20															10023882
1243		FIRM INDUSTRIES LOUISVILLE KY		6.00															00230359
1244		PRODUCOR GENERAL FREDERICK MD		110															00220815
1245		CHROMETRON CORP HUNTINGTON W VA		6.00															10000359
1246		INTL HARVESTER MEMPHIS TN		6.00															10041257
1247		KLEEN SEED DELINING SHAFTER CA		6.00															00182753
1248		MOBIL OIL CLEVELAND OH		29.3															00110057
1249		MOBILE INC EIGHTY-FOUR PENNA		240															00186724
1250		ORGANIC EPC DIV ST PETERS MO		1.20															00153265
1251		PENWALT CORP BELLEVILLE NJ		340															00144215
1252		PHILADELPHIA ELEC PHIL PA		6.00															10002409
1253		PPS CLEVELAND OH		555															100003191

932520234

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Penalty (\$): 8,500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-87-0574 Case Name: JOSEPH SUPOR & SON TRUCKING &
Type: CAA COMPLIANCE ORDER
File Date: 02/23/1988 Conclusion Date:
Defendant: JOSEPH SUPOR & SON TRUCKING &
Law(s): CAA 112
Violation(s): National Emission Standard for Hazardous Air Pollutant
Pollutant(s): ASBESTOS
Facility(s):
Name : JOSEPH SUPOR & SON TRUCKING
City : HARRISON State: NJ Zip: 07029
Penalty (\$): Superfund Cost Awarded (\$):
Result: Source Agrees

Administrative Action 02-88-0782 Case Name: DRIVER HARRIS ALLOYS
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 09/26/1984 Conclusion Date: 06/14/1985
Defendant: ~~DRIVER HARRIS ALLOYS~~
Law(s): TSCA 6E
Violation(s): General facility requirements
Pollutant(s): ~~PCB~~
Facility(s):
Name : DRIVER HARRIS CO
City : HARRISON State: NJ Zip: 07029
Penalty (\$): 8,500 Superfund Cost Awarded (\$):
Result: Consent instrument with penalty

Administrative Action 02-91-0068 Case Name: HARRISON BAKING
Type: CAA COMPLIANCE ORDER
File Date: 02/21/1991 Conclusion Date: 09/20/1991
Defendant: HARRISON BAKING
Law(s): CAA 114
Violation(s): CAA/114 (Info)
Pollutant(s): VOLATILE ORGANIC COMPOUND
Facility(s):
Name : HARRISON BAKING CO INC
City : HARRISON State: NJ Zip: 07029
Penalty (\$): Superfund Cost Awarded (\$):
Result: Source Agrees

Administrative Action 02-92-0074 Case Name: DRIVER-HARRIS ALLOYS INC
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 03/23/1992 Conclusion Date: 06/25/1992
Defendant: DRIVER-HARRIS ALLOYS INC
Law(s): TSCA 6E
Violation(s): General facility requirements
Pollutant(s): PCB

932520235

Facility Name: DRIVER HARRIS CO
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029
EPA ID: NJD002181386 EPA Region: 02 County Code: 017

List of alias records for this facility follows:

Record Type: RCRIS System ID: NJD002181386
Facility Name: HARRISON ALLOYS INC
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029
SICs: 3356

Record Type: AFS System ID: 3401700338
Facility Name: DRIVER HARRIS
Address: 308 MIDDLESEX SE.
HARRISON, NJ 000000000
SICs: 3399
D&B Number: 002181386

Record Type: AFS System ID: 3401700099
Facility Name: HARRISON ALLOYS, INC
Address: 308 MIDDLESEX STREET
HARRISON, NJ 07029
SICs: 3559

Record Type: AFS System ID: 3401705017
Facility Name: HARRISON ALLOYS, INC
Address: 308 MIDDLESEX STREET
HARRISON, NJ 07029
SICs: 3398

Record Type: NCDB System ID: I02#198407173135 1
Facility Name: DRIVE-HARRIS ALLOYS INC.
Address: 308 MIDLESSEX ST.
HARRISON, NJ 07029

Record Type: NCDB System ID: D02#PCB-84-0117
Facility Name: DRIVER-HARRIS ALLOYS INC
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029

Record Type: NCDB System ID: I02#199201091075 2
Facility Name: DRIVER-HARRIS ALLOYS INC.
Address: 308 MIDDLESEX ST.

HARRISON, NJ 07029

Record Type: NCDB System ID: D02#PCB-92-0128
Facility Name: DRIVER-HARRIS ALLOYS INC
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029

Record Type: NCDB System ID: I02#199201091075 1
Facility Name: HARRISON ALLOYS
Address: 308 MIDDLESEX AVE.
HARRISON, NJ 07029

Record Type: DOCKET System ID: 02-88-0782
Facility Name: DRIVER HARRIS CO
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029
SICs: 3356 3351 3339 5051
D&B Number: 002181386

Record Type: DOCKET System ID: 02-92-0074
Facility Name: DRIVER HARRIS CO
Address: 308 MIDDLESEX ST
HARRISON, NJ 07029
SICs: 3356 3351 3339 5051
D&B Number: 002181386

Record Type: PADS System ID: NJD002181386
Facility Name: DRIVER HARRIS ALLOYS INC
Address: 308 MIDDLESEX STREET
HARRISON, NJ 07029
D&B Number: 002181386

Record Type: TRIS System ID: 07029DRVRH308MI
Facility Name: HARRISON ALLOYS INC.
Address: 308 MIDDLESEX ST.
HARRISON, NJ 07029
SICs: 3356
D&B Number: 157408329

932520237

Facility Name: ~~DRIVER HARRIS ALLOYS INC.~~ Reporting Year: 1993
Street : 308 MIDDLESEX STREET
City : HARRISON State: NJ Zip: 070290000
County : HUDSON EPA ID: NJD002181386
Mailing Address: 308 MIDDLESEX STREET
Mailing City : HARRISON State: NJ Zip: 070290000
Year: 1993 Total Waste Federal Wst. RCRA Waste
Tons Generated : 15,911.06 15,896.64 235.66
Tons Managed : 15,655.46 15,655.46 0.00
Tons Shipped : 469.43 235.41 235.41
SIC Code(s):
Contact: RAYMOND CRABTREE Phone: 2014834800
Generator Status : Large Quantity Generator (LQG)
Storage Status : No RCRA-permitted or interim status storage
RCRA TDR Status : No on-site TDR; site has no plans to develop system
Exempt TDR Status: Yes, haz. waste TDR in current year

List of wastes generated by this facility:

Waste Desc.: RINSE WATER AND SPENT ACID FROM METAL CLEANING OPERATION
EPA Waste Code(s) for this generated waste-
D007 Chromium
Tons Generated: 15,554.63
Tons Generated & Managed On-site: 15,554.63

Waste Desc.: INDUSTRIAL WASTE WATER TREATMENT SLUDGE.
CHARACTERISTICALLY
HAZARDOUS FOR CHROMIUM
EPA Waste Code(s) for this generated waste-
D007 Chromium
Tons Generated: 216.51
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
INMETCO INC
ELLWOOD CITY, PA
System type: M011
Tons sent: 216.51 EPA ID: PAD087561015

Waste Desc.: LAB PACK (INC. WASTE CYANIDE) OLD LABORATORY CHEMICALS
EPA Waste Code(s) for this generated waste-
D003 Reactive waste
P098 Potassium cyanide K(CN)
P106 Sodium cyanide Na(CN)
D002 Corrosive waste
Tons Generated: 0.01
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
BDT INC
CLARENCE, NY
System type: M141
Tons sent: 0.01 EPA ID: NYD000632372

Waste Desc.: LAB PACK (INC. AMMONIUM VANADATE 8 ARSCENIC) OLD
LABORATORY

CHEMICALS

EPA Waste Code(s) for this generated waste-

P010 Arsenic acid H3AsO4
P119 Ammonium vanadate or Vanadic acid, ammonium salt
D008 Lead
D007 Chromium
D006 Cadmium

Tons Generated: 0.18

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M141

Tons sent: 0.18 EPA ID: NYD057770109

Waste Desc.: LAB PACK (MIXED CHEMICALS) OLD LABORATORY CHEMICALS

This is state-only waste (no Federal waste codes).

State waste code(s): LABP

Tons Generated: 0.14

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

UNKNOWN/BAD EPA ID

System type: M141

Tons sent: 0.14 EPA ID: NJD057770109

Waste Desc.: ACIDIC AQUEOUS WASTE FROM METAL CLEANING

EPA Waste Code(s) for this generated waste-

D002 Corrosive waste

Tons Generated: 83.40

Tons Generated & Managed On-site: 83.40

Waste Desc.: WASTE OIL CONTAMINATED WITH CHLORINATED SOLVENT

EPA Waste Code(s) for this generated waste-

F001 Spent halogenated solvents used in degreasing (see 1991 Form)

Tons Generated: 0.92

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

RESEARCH OIL CO

CLEVELAND, OH

System type: M041

Tons sent: 0.92 EPA ID: OHD004178612

Waste Desc.: WASTE OIL SLUDGE CONTAMINATED WITH NAPHTHA

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste

Tons Generated: 0.23

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M041

Tons sent: 0.23 EPA ID: NYD057770109

Waste Desc.: WASTE OIL AND FILTER SLUDGE GENERATED FROM WIRE DRAWING
PROC

ESS

This is state-only waste (no Federal waste codes).

State waste code(s): X726

Tons Generated: 4.82

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

RESEARCH OIL CO

CLEVELAND, OH

System type: M051

Tons sent: 2.29 EPA ID: OHD004178612

CLEAN HARBORS OF BALTIMORE

BALTIMORE, MD

Tons sent: 1.61 EPA ID: MDD980555189

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M051

Tons sent: 1.15 EPA ID: NYD057770109

Waste Desc.: WASTE OILY RAGS AND DEBRIS GENERATED BY EQUIPMENT;
MAINTENAC

E

This is state-only waste (no Federal waste codes).

State waste code(s): X725

Tons Generated: 1.85

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CLEAN HARBORS OF BALTIMORE

BALTIMORE, MD

System type: M141

Tons sent: 1.10 EPA ID: MDD980555189

RESEARCH OIL CO

CLEVELAND, OH

System type: M141

Tons sent: 0.60 EPA ID: OHD004178612

Waste Desc.: LEAD CONTAMINATED RAGS AND DEBRIS, CLEANING OF EQUIPMENT
EPA Waste Code(s) for this generated waste-

D008 Lead

Tons Generated: 0.50

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M043

Tons sent: 0.50 EPA ID: NYD057770109

Waste Desc.: WASTE PETROLEUM NAPHTHA

932520240

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste

Tons Generated: 0.25

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M041

Tons sent: 0.02 EPA ID: NYD057770109

RESEARCH OIL CO

CLEVELAND, OH

System type: M061

Tons sent: 0.02 EPA ID: OHD004178612

Waste Desc.: LUBRICANT WASTE OIL CONTAMINATED WITH FLAMMABLE LIQUID

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste

Tons Generated: 0.46

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC

WAMPSVILLE, NY

System type: M089

Tons sent: 0.23 EPA ID: NYD057770109

RESEARCH OIL CO

CLEVELAND, OH

System type: M089

Tons sent: 0.23 EPA ID: OHD004178612

Waste Desc.: AQUEOUS ALKALINE METAL WIRE CLEANING SOLUTION, SODIUM HYDROX

IDE NITRILOTRIACETIC ACID TRISODIUM SALT, SODIUM METASILICAT

E

EPA Waste Code(s) for this generated waste-

D007 Chromium

Tons Generated: 22.94

Tons Generated & Managed On-site: 17.43

Waste Desc.: MINERAL OIL CONTAMINATED WITH P.C.B.'S/DRAINED FROM PLANT

DI

DISTRIBUTION TRANSFORMER

This is state-only waste (no Federal waste codes).

State waste code(s): X750 MA02

Tons Generated: 7.34

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

APTUS INCINERATION, CHEMICAL TREATMENT

COFFEYVILLE, KS

System type: M041

Tons sent: 226.86 EPA ID: KSD981506025

932520241

Waste Desc.: ~~LARGE LOW-VOLTAGE PCB CAPACITORS FROM INDUCTION MELTING~~
~~PROC~~

~~ESS~~

This is state-only waste (no Federal waste codes).
State waste code(s): X753
Tons Generated: 0.22
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
CLEAN HARBORS OF BRAINTREE, INC.
BRAINTREE, MA
System type: M043
Tons sent: 0.22 EPA ID: MAD053452637

Waste Desc.: OLD PAINT RELATED WASTE
EPA Waste Code(s) for this generated waste-
F003 Spent non-halogenated solvents (see 1991 Form)
F005 Spent non-halogenated solvents (see 1991 Form)
D001 Ignitable waste
Tons Generated: 0.23
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M041
Tons sent: 0.23 EPA ID: NYD057770109

Waste Desc.: COMBUSTIBLE SOLVENT FROM DEGREASING OPERATIONS; WASTE
PETROL

EUM NAPTHA

EPA Waste Code(s) for this generated waste-
D001 Ignitable waste
Tons Generated: 3.87
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
SAFTY-KLEEN CORP.
NEWARK, NJ
System type: M029
Tons sent: 3.82 EPA ID: NJD000768093

Waste Desc.: ~~P.C.B. CONTAMINATED RAGS AND DEBRIS FROM CLEANUP~~

This is state-only waste (no Federal waste codes).
State waste code(s): X751
Tons Generated: 0.05
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
APTUS INCINERATION, CHEMICAL TREATMENT
COFFEYVILLE, KS
System type: M043
Tons sent: 0.05 EPA ID: KSD981506025

Waste Desc.: CLEANOUT OF FUEL OIL TANKS
EPA Waste Code(s) for this generated waste-
D001 Ignitable waste

Tons Generated: 12.51
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
CYCLE CHEM INC
ELIZABETH, NJ
System type: M061
Tons sent: 12.51 EPA ID: NJD002200046

Facility Name: DRIVER HARRIS ALLOYS INC Reporting Year: 1993
Street : 308 MIDDLESEX STREET
City : HARRISON State: NJ Zip: 070290000
County : HUDSON EPA ID: NJD002181386
Mailing Address: 308 MIDDLESEX STREET
Mailing City : HARRISON State: NJ Zip: 070290000
Year: 1993 Total Waste Federal Wst. RCRA Waste
Tons Generated : 15,911.06 15,896.64 235.66
Tons Managed : 15,655.46 15,655.46 0.00
Tons Shipped : 469.43 235.41 235.41
SIC Code(s):
Contact: RAYMOND CRABTREE Phone: 2014834800
Generator Status : Large Quantity Generator (LQG)
Storage Status : No RCRA-permitted or interim status storage
RCRA TDR Status : No on-site TDR; site has no plans to develop system
Exempt TDR Status: Yes, haz. waste TDR in current year

List of wastes generated by this facility:

Waste Desc.: RINSE WATER AND SPENT ACID FROM METAL CLEANING OPERATION
EPA Waste Code(s) for this generated waste-
D007 Chromium
Tons Generated: 15,554.63
Tons Generated & Managed On-site: 15,554.63

Waste Desc.: INDUSTRIAL WASTE WATER TREATMENT SLUDGE.
CHARACTERISTICALLY
HAZARDOUS FOR CHROMIUM
EPA Waste Code(s) for this generated waste-
D007 Chromium
Tons Generated: 216.51
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
INMETCO INC
ELLWOOD CITY, PA
System type: M011
Tons sent: 216.51 EPA ID: PAD087561015

Waste Desc.: LAB PACK (INC. WASTE CYANIDE) OLD LABORATORY CHEMICALS
EPA Waste Code(s) for this generated waste-
D003 Reactive waste
P098 Potassium cyanide K(CN)
P106 Sodium cyanide Na(CN)
D002 Corrosive waste
Tons Generated: 0.01
Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-
BDT INC
CLARENCE, NY
System type: M141
Tons sent: 0.01 EPA ID: NYD000632372

Waste Desc.: LAB PACK (INC. AMMONIUM VANADATE 8 ARSCENIC) OLD
LABORATORY

CHEMICALS

EPA Waste Code(s) for this generated waste-

P010 Arsenic acid H3AsO4
P119 Ammonium vanadate or Vanadic acid, ammonium salt
D008 Lead
D007 Chromium
D006 Cadmium

Tons Generated: 0.18
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M141
Tons sent: 0.18 EPA ID: NYD057770109

Waste Desc.: LAB PACK (MIXED CHEMICALS) OLD LABORATORY CHEMICALS
This is state-only waste (no Federal waste codes).

State waste code(s): LABP
Tons Generated: 0.14
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
UNKNOWN/BAD EPA ID
System type: M141
Tons sent: 0.14 EPA ID: NJD057770109

Waste Desc.: ACIDIC AQUEOUS WASTE FROM METAL CLEANING

EPA Waste Code(s) for this generated waste-

D002 Corrosive waste
Tons Generated: 83.40
Tons Generated & Managed On-site: 83.40

Waste Desc.: WASTE OIL CONTAMINATED WITH CHLORINATED SOLVENT

EPA Waste Code(s) for this generated waste-

F001 Spent halogenated solvents used in degreasing (see 1991 Form)
Tons Generated: 0.92
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
RESEARCH OIL CO
CLEVELAND, OH
System type: M041
Tons sent: 0.92 EPA ID: OHD004178612

Waste Desc.: WASTE OIL SLUDGE CONTAMINATED WITH NAPHTHA

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste

Tons Generated: 0.23
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M041
Tons sent: 0.23 EPA ID: NYD057770109

Waste Desc.: WASTE OIL AND FILTER SLUDGE GENERATED FROM WIRE DRAWING
PROC

ESS
This is state-only waste (no Federal waste codes).
State waste code(s): X726
Tons Generated: 4.82
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
RESEARCH OIL CO
CLEVELAND, OH
System type: M051
Tons sent: 2.29 EPA ID: OHD004178612

CLEAN HARBORS OF BALTIMORE
BALTIMORE, MD
Tons sent: 1.61 EPA ID: MDD980555189

NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M051
Tons sent: 1.15 EPA ID: NYD057770109

Waste Desc.: WASTE OILY RAGS AND DEBRIS GENERATED BY EQUIPMENT;
MAINTENAC

E
This is state-only waste (no Federal waste codes).
State waste code(s): X725
Tons Generated: 1.85
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
CLEAN HARBORS OF BALTIMORE
BALTIMORE, MD
System type: M141
Tons sent: 1.10 EPA ID: MDD980555189

RESEARCH OIL CO
CLEVELAND, OH
System type: M141
Tons sent: 0.60 EPA ID: OHD004178612

Waste Desc.: LEAD CONTAMINATED RAGS AND DEBRIS, CLEANING OF EQUIPMENT
EPA Waste Code(s) for this generated waste-
D008 Lead
Tons Generated: 0.50
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-

NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M043
Tons sent: 0.50 EPA ID: NYD057770109

Waste Desc.: WASTE PETROLEUM NAPTHA
EPA Waste Code(s) for this generated waste-
D001 Ignitable waste
Tons Generated: 0.25
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M041
Tons sent: 0.02 EPA ID: NYD057770109

RESEARCH OIL CO
CLEVELAND, OH
System type: M061
Tons sent: 0.02 EPA ID: OHD004178612

Waste Desc.: LUBRICANT WASTE OIL CONTAMINATED WITH FLAMMABLE LIQUID
EPA Waste Code(s) for this generated waste-
D001 Ignitable waste
Tons Generated: 0.46
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M089
Tons sent: 0.23 EPA ID: NYD057770109

RESEARCH OIL CO
CLEVELAND, OH
System type: M089
Tons sent: 0.23 EPA ID: OHD004178612

Waste Desc.: AQUEOUS ALKALINE METAL WIRE CLEANING SOLUTION, SODIUM
HYDROX
IDE NITRILOTRIACETIC ACID TRISODIUM SALT, SODIUM
METASILICAT
E

EPA Waste Code(s) for this generated waste-
D007 Chromium
Tons Generated: 22.94
Tons Generated & Managed On-site: 17.43

Waste Desc.: ~~MINERAL OIL CONTAMINATED WITH P-C-B-S/DRAINED FROM PLANT~~
~~DI~~
~~ISTRIBUTION TRANSFORMER~~

This is state-only waste (no Federal waste codes).
State waste code(s): X750 MA02
Tons Generated: 7.34
Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-
APTUS INCINERATION, CHEMICAL TREATMENT
COFFEYVILLE, KS
System type: M041
Tons sent: 226.86 EPA ID: KSD981506025

Waste Desc.: ~~LARGE LOW VOLTAGE PCB CAPACITORS FROM INDUCTION MELTING~~
~~PROC~~

~~ESS~~

This is state-only waste (no Federal waste codes).
State waste code(s): X753
Tons Generated: 0.22
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
CLEAN HARBORS OF BRAINTREE, INC.
BRAINTREE, MA
System type: M043
Tons sent: 0.22 EPA ID: MAD053452637

Waste Desc.: OLD PAINT RELATED WASTE
EPA Waste Code(s) for this generated waste-
 F003 Spent non-halogenated solvents (see 1991 Form)
 F005 Spent non-halogenated solvents (see 1991 Form)
 D001 Ignitable waste
Tons Generated: 0.23
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
NORTHEAST ENVIROMENTAL SERVICES INC
WAMPSVILLE, NY
System type: M041
Tons sent: 0.23 EPA ID: NYD057770109

Waste Desc.: COMBUSTIBLE SOLVENT FROM DEGREASING OPERATIONS; WASTE
PETROL

EUM NAPTHA

EPA Waste Code(s) for this generated waste-
 D001 Ignitable waste
Tons Generated: 3.87
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
SAFTY-KLEEN CORP.
NEWARK, NJ
System type: M029
Tons sent: 3.82 EPA ID: NJD000768093

Waste Desc.: P.C.B. CONTAMINATED RAGS AND DEBRIS FROM CLEANUP
This is state-only waste (no Federal waste codes).
State waste code(s): X751
Tons Generated: 0.05
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
APTUS INCINERATION, CHEMICAL TREATMENT
COFFEYVILLE, KS

932520247

System type: M043
Tons sent: 0.05 EPA ID: KSD981506025

Waste Desc.: CLEANOUT OF FUEL OIL TANKS
EPA Waste Code(s) for this generated waste-
 D001 Ignitable waste
Tons Generated: 12.51
Tons Generated & Managed On-site: 0.00
This waste was sent off-site to-
CYCLE CHEM INC
ELIZABETH, NJ
System type: M061
Tons sent: 12.51 EPA ID: NJD002200046

Otis Elevator Company

Document No. 6670-039

Attachment D

Environmental Due Diligence Assessment of Habitat International, Ltd.

Harrison, New Jersey
Danbury, Connecticut

Prepared for:

CIT Group/Business Credit, Inc.
New York, NY

May 1988

ERT

An ENSR Company

AHHCC0184

932520251

The facility currently has temporary 90-day NJDEP air emissions control permits for its wet and dry spray booths and internal and external dust collectors. After a state inspection a 5-year permit will be issued. The facility also has an NJDEP air emissions control permit for its existing boiler stack. This permit expires in May, 1993.

The facility received a Notice of Violation and an Administrative Order from NJDEP on January 28, 1986, for violations of the New Jersey Solid Waste Management Act. Intrex resolved this matter on August 14, 1987, by submitting a Verification of Compliance to NJDEP.

During the site visit, ERT personnel observed frayed insulation around some of the pipes in the Intrex building. ~~Three transformers located in the building leased by Intrex on the opposite side of First Street were tested by the site owner and were reportedly found to contain less than 50 parts per million PCB's~~

There was one underground storage tanks across First Street and outside of the boiler house. The tank reportedly contained diesel fuel for vehicles and the tank and an associated pump were removed by the site owner approximately 3 to 4 years ago. The age of the tank was not known. According to the site owner, the tank was found to be intact and not leaking upon removal and therefore no soils were removed along with the tank. However, there is a possibility of subsurface contamination resulting from the UST or from past operations.

The Intrex site is located in an area where fill materials were commonly mixed with industrial waste. The area along the Passaic River was filled in before development. In addition, the site is located within one half mile of a dioxin contaminated Superfund site. The issues may pose future problems concerning an environmental cleanup. These conditions indicate that it would not be unreasonable to find contaminated soil at industrial sites in this vicinity.

2. Preliminary Opinion Regarding the Potential Presence of a Significant Hazardous Waste Release, including the Identification of the Potential Risks Involved and Any Limitations Thereto:

The only hazardous wastes generated at the facility include flammable liquids, waste solids and waste liquids. These wastes appeared to be properly drummed and maintained in designated areas inside the building on

ENVIRONMENTAL CONCERNS TRACKING SHEET

page 1 of 7

INDUSTRIAL ESTABLISHMENT

Name: Intrex Corp.

ECRA Case Number: 91646

POTENTIAL AREAS OF ENVIRONMENTAL CONCERN

AREA OF CONCERN	SAMPLING REQ'D? : YES OR NO	CLEANUP REQ'D? : YES OR NO	FINAL OUTCOME
<p>dust collectors & spray booths</p> <p>IL# 10568</p>	<p>RESULTS OF SAMPLING</p> <p>all units are permitted. Intrex has approximately 26 air permits.</p> <p>2 air violations: 5/24/89 & 6/16/89 all fines & repairs completed as the administrative orders.</p>	<p>CLEANUP ACTIONS REQ'D OR COMPLETED</p>	
<p>POTENTIAL POLLUTANTS</p> <p>PHC BW VO METALS</p> <p>AE PCBs PP +40</p> <p>Other</p>	<p>all equipment has been removed from the facility. verified by AHW 1/7/92</p>		<p>NFA AHW 1/7/93</p>
<p>in boiler house (west side of 1st street)</p> <p>sump 4' deep 4' wide</p> <p>sink in boiler room</p>	<p>RESULTS OF SAMPLING</p> <p>sump is for boiler blowdown condensate discharge to PVSC. prior to 1983 discharge was to the Passaic River.</p> <p>sink also goes to PVSC.</p> <p>past discharges to River referred to DWR.</p>	<p>CLEANUP ACTIONS REQ'D OR COMPLETED</p>	<p>FINAL OUTCOME</p> <p>NFA AHW 1/1/93</p>
<p>POTENTIAL POLLUTANTS</p> <p>PHC BW VO METALS</p> <p>AE PCBs PP +40</p> <p>Other</p>			
<p>sump in northwest corner of prod bldg.</p>	<p>RESULTS OF SAMPLING</p> <p>for condensate in utility area. sump is concrete and discharges to PVSC. prior to 1983 discharged to Passaic River. past discharge to River referred to DWR.</p>	<p>CLEANUP ACTIONS REQ'D OR COMPLETED</p>	<p>FINAL OUTCOME</p> <p>AHH0000137</p> <p>NFA AHW 1/5/93</p>
<p>POTENTIAL POLLUTANTS</p> <p>PHC BW VO METALS</p> <p>AE PCBs PP +40</p> <p>Other</p>			

932520253

AREA OF CONCERN	SAMPLING REQ'D? : YES OR NO	CLEANUP REQ'D? : YES OR NO	FINAL OUTCOME
storm drains end of prop.	RESULTS OF SAMPLING all storm drains to the Passaic River.	CLEANUP ACTIONS REQ'D or COMPLETED	
POTENTIAL POLLUTANTS BN VO METALS PCBS PP +40			NFA AHW

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
errior temporary n storage of materials E corner of bldg	RESULTS OF SAMPLING 1/7/92 AHW verified pavement is intact after debris had been removed. no major stains noted	CLEANUP ACTIONS REQ'D OR COMPLETED	
POTENTIAL POLLUTANTS BN VO METALS PCBS PP +40			NFA AHW

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
waste storage errior	RESULTS OF SAMPLING flammable liquids, waste liquids, waste solids. removal contracted by S&W Waste. no problems noted manifests submitted.	CLEANUP ACTIONS REQ'D OR COMPLETED	
POTENTIAL POLLUTANTS BN VO METALS PCBS PP +40			NFA AHW

AREA OF CONCERN	SAMPLING REQ'D? : YES OR NO	CLEANUP REQ'D? : YES OR NO	FINAL OUTCOME
water separator SW corner lg.	RESULTS OF SAMPLING oil water separator discharges to sanitary system PVSC. NFA.	CLEANUP ACTIONS REQ'D or COMPLETED	
POTENTIAL POLLUTANTS BN VO METALS PCBS PP +40			AHH000138 NFA AHW

932520254

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
Floor Drains: 1 paint stor rm inactive 1 paint spray rm inactive 1 paint spray rm active 1 paint rm hallway POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other:	RESULTS OF SAMPLING inactive drains went to Passaic River and were sealed prior to Intrix's occupancy. active paint spray drain is for eyewash station and goes to PVSC. discharges to River referred to DWR.	CLEANUP ACTIONS REQ'D OR COMPLETED	NFA AHH 1/1

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
paint storage room interior POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other:	RESULTS OF SAMPLING storage of paint, solvents & adhesive south side of bldg. 1/7/92 all paints removed. manifests submitted.	CLEANUP ACTIONS REQ'D OR COMPLETED	NFA AHH 1/1

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
loading docks west side of bldg. POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other:	RESULTS OF SAMPLING SE loading dock does not have any drains. NE loading dock had a drain which went to the Passaic River and was subsequently sealed in 1985. past discharges to River referred to DWR.	CLEANUP ACTIONS REQ'D OR COMPLETED	NFA AHH 1/1

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
1 120,000 gallons to boiler house contains #2 fuel oil POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40	RESULTS OF SAMPLING steel tank w/concrete dike. SPCC plan submitted. AGST is 10 years old. prior to this tank there was an AGST for #6 fuel oil for the old boiler system. Tank remains for use by future tenant.	CLEANUP ACTIONS REQ'D OR COMPLETED	AHH000139 NFA AHH 1/1

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AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
3 transformers in boiler room in vault west side of prop.	RESULTS OF SAMPLING no staining or other problems noted. transformers were tested and reported to contain <50 ppm PCB.	CLEANUP ACTIONS REQ'D OR COMPLETED	NFA AHU 1/5/75
POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other			

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
battery house adj to boiler room & AST along River.	RESULTS OF SAMPLING approx 60 batteries which serve as an emergency generator system. concrete floor, no stains noted.	CLEANUP ACTIONS REQ'D OR COMPLETED	NFA AHU 1/5/75
POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other			

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
boiler room asbestos	RESULTS OF SAMPLING boiler room was renovated approx 10 yrs ago. New system installed 1981 boiler insulation is all fiberglass.	CLEANUP ACTIONS REQ'D OR COMPLETED	NFA AHU 1/5/75
POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other			

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
dumpster south side of bld.	RESULTS OF SAMPLING on pavement which is intact. dumpster was used for saw dust, empty paint cans, office trash. no stains or breeches noted.	CLEANUP ACTIONS REQ'D OR COMPLETED	AHH000140 NFA AHU 1/5/75
POTENTIAL POLLUTANTS PHC BN VO METALS AE PCBs PP +40 Other			

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AREA OF CONCERN	SAMPLING REQ'D? : YES OR NO	CLEANUP REQ'D? : YES OR NO	FINAL OUTCOME
<p>haz waste from paint spray booths.</p> <p>POTENTIAL POLLUTANTS Pb, BN, VO, METALS AE PCBs, PP +40 Other: _____</p>	<p>RESULTS OF SAMPLING</p> <p>4 waterfall booths and 8 dry filter booths. solids are drummed and collected by S&W. spent water is drained and collected by S&W. Prior to 1986 the spent water was discharged to the PVSC and PVSC then discharged to the Passaic River.</p>	<p>CLEANUP ACTIONS REQ'D or COMPLETED</p>	<p>NFA AHH 1/1/92</p>

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
<p>discharges to Passaic River</p> <p>POTENTIAL POLLUTANTS Pb, BN, VO, METALS AE PCBs, PP +40 Other: _____</p>	<p>RESULTS OF SAMPLING</p> <p>from 1940-1983 the site was not serviced by a POTW. all sanitary waste, floor drains, boiler blowdown and sumps discharged to the Passaic River. The site was connected to PVSC in 1983. There are no current discharges to the Passaic River.</p> <p>Discharges referred to DWR. 1940-1981 Otis Elevator 1981-1991 Intrex</p>	<p>CLEANUP ACTIONS REQ'D OR COMPLETED</p>	<p>NFA AHH 1/1/92</p>

AREA OF CONCERN	SAMPLING REQ'D? : YES or NO	CLEANUP REQ'D? : YES or NO	FINAL OUTCOME
<p>UGST gasoline 100 gallons</p> <p>in front of boiler use</p> <p>POTENTIAL POLLUTANTS Pb, BN, VO, METALS AE PCBs, PP +40 Other: _____</p>	<p>RESULTS OF SAMPLING</p> <p>tank was reportedly used by Otis Elevator to fuel vehicles. Tank and pump removed Nov. 1986. backfilled w/ stone 4 samples collected at 4.5' (B1-B4) for BTEX and Pb. all BTEX < cp stds.</p> <p>Pb results in ppm: B1 324, B2 228 B3 181, B4 887. Avg= 405</p> <p>cp std = 100 ppm (res) 600 ppm (ind)</p>	<p>CLEANUP ACTIONS REQ'D OR COMPLETED</p> <p>4 more samples collected at 4.5' for horizontal delineation of Pb. Results in ppm: B5 303, B6 1624, B7 396, B8 218. Avg 520. Water table is at 5'. As per 3/19/92 peer review a gw investigation is not required.</p> <p>As per DS 11/92 they can restrict the whole site w/ an avg. of 520 ppm Pb site wide.</p>	<p>DER requested Pb contamination</p> <p>NFA AHH 1/1/92</p>

AREA OF CONCERN	SAMPLING REQ'D? : YES OR NO	CLEANUP REQ'D? : YES OR NO	FINAL OUTCOME
<p>POTENTIAL POLLUTANTS Pb, BN, VO, METALS AE PCBs, PP +40 Other: _____</p>	<p>RESULTS OF SAMPLING</p>	<p>CLEANUP ACTIONS REQ'D or COMPLETED</p>	<p>AHH000141</p>

932520257

Hazardous Substance Management Research Center

Facility Name: ~~HAZARDOUS SUBSTANCES MANAGEMENT RESEARCH CENTER~~
Address: 138 WARREN STREET OTTO YORK BUILDING
NEWARK, NJ 07102
EPA ID: NJD986641942 EPA Region: 02 County Code: 013

List of alias records for this facility follows:

Record Type: ~~PADS~~ System ID: NJD986641942
Facility Name: HAZ SUBS MGMT RESEARCH CENTER
Address: 138 WARREN STREET, OTTO YORK BUILD
NEWARK, NJ 07102

Celanese Plastics Division

932520262

01131-A DIRECT #2
01/12/72

ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

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IN THOUSANDS OF POUNDS AND DOLLARS-																			
Q. 1971	NAME OF PRODUCT/CUSTOMER	POTENTIAL	1971 YEAR SALES	1970 YEAR SALES	1971 CURR YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUMULATIVE 1971	
	PARSONS DIST 54000-R-30L															00305A		1040-480-1	
5700	ATLANTIC VARNISH RICHMOND VA				.150								.150					00187225	
5116	ATLAS CHEM INL ATLAS POINT DE	10.0	8.10	10.0	2.03							2.03						0011773	
5116	BASE WYANDOTTE CARLSTADT NJ				.750							.500	.250					0020000	
5116	BASE WYANDOTTE HACKENSACK NJ	5.00	3.00	5.00														00150000	
	PARENT CUST. TOT-BASE WYANDOTTE	5.00	3.00	5.00	.750							.500	.250					10002302	
5812	BOBAY CHEMICAL NATIONA EV		.100															10003302	
5424	FRYE MFG DES MOINE IA	100	17.4	100	.100		.100											00119200	
5812	CELFRAY CO INC FARMINGDALE NJ		.400		.300						.300							10009111	
5424	ADHESIVE ENG SAN CARLOS CA		.050															10000000	
5812	MORGAN ADHESIVES CO STOK OH	.200	.100	.200	.100	.100												10000000	
	PARENT CUST. TOT-DEWIS CO MINNEA	.200	.150	.200	.100	.100												00045535	
	BEST CLOTHES SINKING SERGS PA				.150												.150	00273244	
5812	BOEING CORPORATION NEWARK NJ		.100		.300												.300	00212335	
5812	PIUMA PRODUCTS SAYREVILLE NJ				52.0								28.0			24.0		10000000	
5812	BURDEN PERBODY HA	1000	.250		.600		.15		1.00	.05	.90			.20	.10			10010411	
5812	W A BRIDGES & SONS PHILADEL PA				.300				.300									10012007	
5812	BUCKING PAINT CO BALTIMORE MD		.100		2.10				.10						1.00	1.00		10012000	
5812	BUHL CHEM WEIRSDALE FLA	.500	.300	.500	.300	.300		.300										10012000	
5812	CORBY CORPORATION CHICAGO ILL				.100						.100							00250275	
5812	CARROLL PROD FARMINGDALE LI NY				.000							.400		.400				10014220	
5812	CASTROL OILS NEWARK NJ		.800		1.05		.450	.600										10014433	
5812	CATAPULT CORP JACKSON MS				.050					.050								00115170	
5812	CELANESE COATINGS NEWARK NJ				5.00								3.80	1.20				10014647	
5812	CELANESE PLASOLV NEWARK NJ		.050															10014775	
	PARENT CUST. TOT-CELANESE CORP N		.050		5.00								3.80	1.20				00045026	
5812	ALLEG SOLV CARNEGIE CARNEG PA	40.0		40.0														00107700	
5812	ALLEG SOLV CARNEGIE CORAOP PA		60.5		63.7		10.0		1.2	10.0	12.5	3.0				20.0	7.0	10002000	
5812	ALLEG SOLV CARNEGIE PITTS PA																	10002117	
	TOT P-T ALLEG SOLV CARN * POUNDS	40.0	60.5	40.0	63.7		10.0		1.2	10.0	12.5	3.0				20.0	7.0	00107700	
5812	AMSCO SOLVENTS CINCINNATI OH	350	202	350	55.5		21.5			16.0	5.0				13.0			10005351	
	TOT P-T AMSCO SOLVENTS * POUNDS	350	202	350	55.5		21.5			16.0	5.0				13.0			10005351	
5812	BUFFALO SOLVENTS JONAHADA NY	120	98.0	120	145					25.0			30.0	30.0	30.0	30.0		10012300	
	TOT P-T BUFFALO SOLV BU * POUNDS	120	98.0	120	145					25.0			30.0	30.0	30.0	30.0		10012300	

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Westinghouse

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ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

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- IN THOUSANDS OF POUNDS AND DOLLARS -																				
Q	Y	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES QTR. FOR CURR. YEAR	SALES CURR. YTD.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST. NO. / MAP. CTS. GP.	
		TRANSFORM PYRANOL A13630															003	8A	1050-300-1	
1237		UNIV MACHINERY & EQUIP BEADING		.675															00212040	
1266		COPT OF INTERIOR US PAGE 22		.675															00225746	
1223		GENERAL SERVICE ADM RICHMAN WA		1.35															00245593	
1231		U S ARMY REH CAMPBELL AND PA				.120						.120							00259632	
1266		U S GOVT EL TORO CALIFORNIA		.675															00385729	
1260		U S GOVT LONG BEACH CALIF		1.35															10004456	
1237		U S GOVT ARMY PHILADELPHIA PA				2.03					2.03								00297578	
1258		US MARINE BARSTON CALIF				1.20						1.25		.05					00257230	
1266		U S NAVY OAKLAND CALIF		.675		2.70											.68	2.03	10064283	
1237		U S NAVAL SHIP CENT C MACHIA ME		1.35															00183691	
		PARENT CUST. TOT-U S GOVT WASHIN		6.08		6.05					2.03	1.37		.05		.68		2.03	10084733	
1266		UTAH INTERNATIONAL SAN FRAN CA		.675															00222763	
1266		VALLEY FAIR SHOP SAN JOSE CA																	00224665	
1273		VAN NESS CO DUTSDEN NY				.675									.675				00265039	
1237		VIRGINIA ELE - PO NORFOLK VA		2.16															10066949	
1231		VIA ELEC POW MOUNT STORM W V				1.35							1.35						10066957	
		PARENT CUST. TOT-VIRGINIA ELE-PO		2.16		1.35							1.35						00648224	
1131		WOLLAND ELECTRIC BUFFALO NY		.675															10087112	
1237		WESTINGHOUSE ELEC FAIRBANKS AK		6.08		.675													00222569	
1237		WESTINGHOUSE SHREVEPORT LA				.675											.675		00270792	
1237		WESTINGHOUSE NEWARK NJ		.735															00242063	
		PARENT CUST. TOT-WESTINGHOUSE EL		6.81		.675											.675		00047740	
1236		WUJUBAL BRQS HALLA HALLA WA		1.35		.675						.675							00230219	
		TOTAL PRODUCT * * * * *	LB	171	1315	2171	1694	91	92	89	.67	96	148	217	222	180	80	301	111	1050-300-1
		TRICHLORODENZENE RESALE																017	2A	9902-C00-1
		TOTAL PRODUCT * * * * *	LB		4.20															9902-C00-1
		70 TOL CLASS TRANSFORMER FLUI LB	8101	15906	15301	15552	379	829	1176	1074	1599	1315	1478	1520	1541	1606	1692	1349		

Wagner Electric Corporation – Cooper Industries

where each of the ten Z's can represent either a hydrogen or a chlorine atom. There are 209 different chlorinated biphenyls and they are collectively referred to as PCBs although many are not actually polychlorinated. Approximately half of these compounds have been synthesized and characterized.

Mixtures of polychlorinated biphenyls are important industrial products. The most common tradenames for these mixtures are Aroclor,^{*} Inerteen,^{**} Kanechlor,^{***} and Pyranol.[†] known tradenames for PCB-containing products are listed in Table 1. PCB-containing dielectrics (electrical insulators) are generally referred to as "askarels" in the electrical industry.

Table 1. -- Tradenames for Known PCB Containing Products.

Tradename	Tradename Owner
Aroclor	Monsanto Company St. Louis, MO
Chlorextol	Allis-Chalmers Milwaukee, WI
Clophen	Farbenfabriken Bayer GmbH Germany
Dykanol	Federal Pacific Electric Co. Newark, NJ
Fenclor	Caffaro S.P.A. Italy
Inerteen	Westinghouse Electric Corp. Pittsburgh, PA
Kanechlor	Kanegafuchi Chemical Industry Co., Ltd. Japan
Noflamol	Wagner Electric Corporation Newark, NJ <i>370 Orange St., 07107</i>
Phenoclor	Prodelec France
Pyralene	Prodelec France
Pyranol	General Electric Co. Schenectady, NY
Santotherm	Mitsubishi-Monsanto Japan
Therminol [*]	Monsanto Co. St. Louis, MO

*couple
Industries*

Table 1 Note:

*Therminol products now formulated in the U.S. do not contain PCBs. [return to table]

Mixtures of polychlorinated biphenyls are very resistant to degradation, are thermally stable, and resistant to oxidation, acids, bases, and other chemical agents. They are soluble in most of the common organic solvents and lipids, but only slightly soluble in water, glycerol, and glycols. PCBs are good electrical insulators. Although most individual polychlorinated biphenyls are solids at room temperatures, the mixtures vary in consistency from mobile oils to viscous liquids or sticky resins.

PCBs are generally prepared industrially by the chlorination of biphenyl with anhydrous chlorine in the presence of iron filings or a ferric chloride catalyst. Trace quantities of chlorinated naphthalenes and chlorinated dibenzofurans have been reported in some commercial samples of PCBs and it has been suggested that the presence of these impurities may be of toxicological significance.¹⁻³

Commercial PCBs are generally mixtures of many different chlorinated biphenyls, as shown in Table 2, manufactured to meet operational specifications (such as dielectric constant, flash point, fire point, density, percent chlorine, and color); these commercial mixtures may vary chemically from batch to batch.

Table 2. Description of PCB Mixtures.

	Aroclor® 1221*	Aroclor 1016 Aroclor 1242*	Aroclor 1254*	Aroclor 1260†	Kanechlor® 300‡	Kanechlor 400‡	Kanechlor 500‡	
Approximate Chlorine								
	21%	42%	42%	54%	60%	42%	48%	5
Components								
	11	<0.1	<0.1	<0.1				
	51	1	1	<0.1				
	32	20	16	0.5		17	3	
	4	57	49	1		60	33	
	2	21	25	21		23	44	2
	<0.5	1	8	48	12	0.6	16	5
	none detected	<0.1	1	23	38		5	1
	none detected	none detected	<0.1	6	41			
	none detected	none detected	none detected	none detected	8			
					1			

Table 2 Notes: It must be emphasized that these are approximate compositions of the PCB mixtures and that a particular product may vary in chemical composition from batch to batch.

* Weight-weight percent. None detected = less than 0.01%. Source of component compositions: Monsanto Company quoted in Hutzinger, O., *et al.*, *op. cit.*, p. 23 [return to table]

Staley Chemical – A.E. Staley

-IN THOUSAND LF POUNDS AND CILLARS-

	NAME OF PRODUCT/CUSTOMER	POUNDS	1972 YEAR TOTAL	1971 YEAR TOTAL	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	CUSTOMER SALES REP
	PARENT CUST. 101-SEARS ACEDUCK C		5.05														00345276
	DISC PGM PLT														024	28	9998-000-17
2200	.SHALLGROSS CO PHIL PA		.050	.050		.050											10372493
2201	.SHIMCO STEEL PARKELL PA		6.15														10372166
2202	.SHERWIN WILLIAMS LOS ANGE CA		1.22														00137835
2203	.SHERWIN WILLIAMS CHIC IL		2.00														10372654
2204	.SHERWIN WILLIAMS GIBBSBURG NJ		.200	.050	.050												10372677
2205	.SHERWIN WILLIAMS CLEVELAND OH		62.4	8.00	8.00												10372744
	PARENT CUST. 101-SHERWIN WILLIAMS		65.8	8.05	8.05												10372744
2206	.SHERWIN WILLIAMS WILSON CT		.050	.050	.050												00263931
2207	.SHIMCO STEEL PARKELL PA		7.20														10372166
2208	.SHIMCO STEEL PARKELL PA		.050														10372654
2209	.SHIMCO STEEL PARKELL PA		.050														00213116
2210	.SINGER CO RPTZ NJ		15.0														10372654
2211	.SINGER CO SOMERVILLE NJ		1.00														00155322
	PARENT CUST. 101-SINGER CO NYC A		16.0														00345333
2212	.SKAL DIECASTING IN EASTLAKE CH		4.00														00130135
2213	.SKAL DIECASTING IN EASTLAKE CH		1.00														00130135
2214	.SMITH ALUM PT THERM HALL IN		.225														10372654
2215	.SMITHS CONST SUPPLY JONESBORO GA		7.15	1.00	1.00												00240354
2216	.SOLAR COMPOUNDS LINDEN NJ		131	31.5	31.5												10372744
2217	.SOUTHERN BUTYL BELLEVILLE NJ		6.20														10372654
2218	.SOUTHERN AMES RICHMOND VA		6.00														10372744
2219	.SOUTHERN BUTYL BELLEVILLE NJ		.050														00160381
2220	.SOUTHERN BUTYL BELLEVILLE NJ		.045														00244341
2221	.SOUTHERN BUTYL BELLEVILLE NJ		.100														00244341
2222	.SOUTHERN BUTYL BELLEVILLE NJ		1.50														00244341
2223	.SOUTHERN BUTYL BELLEVILLE NJ		1.00														00211552
2224	.SOUTHERN BUTYL BELLEVILLE NJ		.500														00255078
2225	.SOUTHERN BUTYL BELLEVILLE NJ		1.00														00255078
2226	.SPECIALTY COAT CO ELKHART IN		.600														10372654
2227	.SPINDLE INC RUSSELLVILLE AR		.500														00251143
2228	.SPROUT WALLEDA REXY PA		2.00														10372654
2229	.ST-CLARK RUBBER TAYLORSVILLE MI		60.0	15.0	12.5	2.5											10372654
2230	.ST-CLARK RUBBER TAYLORSVILLE MI		.600	.600	.600												10372654
2231	.ST-CLARK RUBBER TAYLORSVILLE MI			24.0					19.0		6.0						10372654
2232	.ST-CLARK RUBBER TAYLORSVILLE MI		.050														00257354
2233	.ST-CLARK RUBBER TAYLORSVILLE MI		.100														00257354
2234	.ST-CLARK RUBBER TAYLORSVILLE MI		10.2														10372654
2235	.ST-CLARK RUBBER TAYLORSVILLE MI																00165376

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ORGANIC DIVISION SPECIALTY PRODUCTS
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- IN THOUSANDS OF POUNDS AND DOLLARS -

NO.	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES CURR. YEAR	SALES CURR. YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUM. 12 / MONTHS
	AROCOR DIST 5560-NI SOL																00385A	1040-430-1
5127	.SAVITY CONST SUPPLY JONESBORO G				2.15	.050												00263504
5114	.SOLAR COMPOUNDS LINDEN NJ	100	53.0	100	131		35.0		.300	33.0	.300	.500	.500	.500		30.0		10077105
5114	.SOMMERDORN BUILD BELLEVILLE NJ		10.0		6.20								3.10	3.10				10077004
5179	.S. WILSON CHEM SAN ANTONIO TX		.200		.100								.100					00232000
5107	.SOUTHERN ADHES RICHMOND VA	10.0	3.65	10.0	6.00					6.00								10077379
5117	.SOUTHWEST CO CARROLLTON GA		5.00															00166244
5216	.SOUTHERN CHEMICAL PATTERSON NJ				.500							.500						00255500
5114	.SPRAGUE ELECTRIC NASHUA N HAMPS		.150															00166200
5039	.ST CLAIR RUBBER MARYSVILLE MI	61.0	48.0	60.0	40.0	5.0	5.0	5.0	5.0		15.0		5.0		5.0	5.0	10.0	10077044
5122	.ST REGIS PAPER NILES ILLINOIS		.115															10063241
5110	.STANLEY CHEMICAL HARRISON NJ				.050							.050						00257304
5120	.CHEVRON RES RICHMOND CALIF				.050		.050											10076401
5107	.PAISLEY PROD FOREST PARK GA				1.00							.500			.500			00224559
5114	.PAISLEY PROD EDISON NJ		6.00															00226772
5007	.STANDARD BRND CHEM CRESKOLD DE	54.0	12.0	54.0														10064133
	PARENT CUST. TOT-STANLEY PARNER	54.0	18.0	54.0	1.00							.500			.500			00064735
5124	.STAR CHEMICAL WESTCHESTER IL		.500		.700				.200			.500						00217350
5125	.STAR CHEMICAL CO DALLAS TX		3.10		1.00								1.80					00211072
	PARENT CUST. TOT-STAR CHEMICAL W		3.60		2.50				.20			.50	1.80					00217950
5124	.STEELEITE NEG ST LOUIS MO	5.00	3.00	5.00														10077572
5124	.STERLING LACQUER ST LOUIS MO		.500															10077520
5124	.SULLIVAN CO MEMPHIS TENN	10.0	4.70	10.0	3.95		1.95								2.00			00211567
5110	.SUN CHEM CARLSTADT N J		.050															10076325
5110	.SUN CHEM CORP E RUTHERFORD NJ	4.00	7.00	4.00	2.40	.600	.600	.600	.600									10076552
	PARENT CUST. TOT-SUN CHEMICAL CO	4.00	7.05	4.00	2.40	.600	.600	.600	.600									10076714
5156	.SUNFLU PAINT AMSTERDAM NY				.100	.100												00213740
5119	.SUN OIL CO MARCUS HOOK PA		.450															10076030
5117	.SUPERIOR LACQUER CO TIGCCA GA		.100		.100			.100										00169854
5115	.SUPERIOR VARNISH PENSACOLA N J		.050											.050				10077222
5124	.SUTHERLAND CO MEMPHIS TN		2.00								2.00							00259349
5124	.SWIFT - CO VERNON CALIFORNIA				32.0												32.0	10077400
5124	.SWIFT - CO SKOKIE ILL	1000																10077356
	PARENT CUST. TOT-SWIFT - CO CHIC	1000			32.0												32.0	10077346
5111	.TAD CHEMICALS INC CHICAGO ILL	6.00	25.0	6.00	32.5			2.5	1.0	3.0		3.0	4.0		10.0	9.0		10077042
5154	.TAURUS CHEM ALBURN N Y				.150						.100	.050						10072055
5125	.TEXAS EASTERN TRAN LUGVM TX				24.0		24.0											10072264

932520274

378

Keegan Landfill

*Tom,
your copy
marked up with
my comments*

FINAL DRAFT
SITE INSPECTION REPORT
KEEGAN LANDFILL
KEARNY, NEW JERSEY

PREPARED UNDER
TECHNICAL DIRECTIVE DOCUMENT NO. 02-8810-75
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER 15, 1989
(REVISED SEPTEMBER 29, 1989)

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:

Donald P. Hesemer
DONALD P. HESSEMER
PROJECT MANAGER

Tamara Marquart
TAMARA MARQUART
SITE MANAGER

REVIEWED/APPROVED BY:

Charles M. Naman *for RN*
RONALD M. NAMAN
FID OFFICE MANAGER

SITE NAME: Keegan Landfill
ADDRESS: Bergen Avenue
Kearny, New Jersey 07032

EPA ID NO.: NJD981490428
LATITUDE: 40° 45' 27" N
LONGITUDE: 74° 08' 07" W

1.0 SITE SUMMARY

The Keegan Landfill Site is an approximately 230-acre tract of land in an industrial section of Kearny, Hudson County, New Jersey. The site is bordered on the south and northwest by Conrail railroad tracks, on the southwest by businesses along Bergen Avenue, and on the northeast by a large wetlands lake. There are residential neighborhoods nearby, as approximately 20,000 people live within 1 mile and 223,000 people live within 3 miles of the site.

The site is the property of the Town of Kearny, but the operator of the landfill was John P. Keegan/Municipal Sanitary Landfill Authority (MSLA). Keegan/MSLA leased the land from the Town of Kearny and operated it as a municipal landfill from the mid 1960s to 1974. Some construction debris, such as concrete and stone, as well as tree branches and limbs, are still being disposed of at the site. There is also unauthorized dumping occurring, as the site is littered with abandoned furniture, appliances, and automobiles. The site is not fenced except for a locked gate at the main Bergen Avenue entrance. Therefore, the potential for direct contact with exposed wastes exists. The Kearny Health Department reported that a member of the Kearny Police Department had worked as a truck driver for Dupont Chemical in Newark in the 1960s. He reported that every morning at least one truck with approximately forty 30-gallon drums went to the Keegan tract. These wastes included chromate and bichromate slurry, pigment wastes, and organic wastes. Disposal of these wastes took place in various areas of the landfill. Approximately 10 drums were observed on site during an off-site reconnaissance conducted by Malcom Pirnie, Inc., on April 28, 1986; however, during the NUS Corporation Region 2 FIT site inspection conducted on April 25, 1989, no evidence of the drums was present.

There is no information available on the quantity of wastes deposited on site or the location of the hazardous waste dumping areas. There have been several underground fires on site, most recently in June and July of 1987. The site is crossed by an unnamed creek and Frank Creek, which originates on site. These two creeks converge south of the site, and flow into the Passaic River.

In a letter dated July 2, 1987, the New Jersey Department of Environmental Protection (NJDEP) recommended that a closure plan be submitted. On July 28, 1987, the NJDEP met with Neglia Engineering Associates to discuss the closure of sections of Keegan Landfill. Neglia Engineering Associates recommended that the access road be improved to provide a turnaround area, that the area of the recently extinguished fires be covered with 2 feet of cover, and that the access road from Bergen Avenue be secured. The current status of the closure plan is unknown.

*DEP
recommended
cover of
entire site*

932520278

On April 25, 1989, NUS Corporation Region 2 FIT personnel collected seven surface water samples and six sediment samples at the Keegan Landfill Site. These samples were collected to determine the presence or absence of Target Compound List (TCL) substances, and the potential for these substances to migrate off site. Results of this sampling indicate the presence of mercury, lead, chromium, polychlorinated biphenyls (PCBs), and several semivolatile compounds in various sediment samples. Several inorganic compounds, including mercury, lead, and chromium, were detected in surface water samples collected in Frank Creek.

Ref. Nos. 1, 2, 3, 4, 14-22

2.0 SITE INSPECTION NARRATIVE

2.1 EXISTING ANALYTICAL DATA

It is unknown whether any sampling has been performed at the Keegan Landfill Site prior to the NUS Corporation Region 2 FIT site inspection on April 25, 1989.

Ref. Nos. 1, 2

2.2 WASTE SOURCE DESCRIPTION

The Keegan Landfill is approximately 230 acres in size. This site was used as a municipal landfill from the mid 1960s to 1974. Construction debris, such as concrete and stone, as well as tree branches and limbs are still being disposed of at the site. Also scattered throughout the site are abandoned automobiles, appliances, and furniture. The landfill is unlined and there have been reports of chromate and bichromate slurry, organic wastes, and pigment wastes being dumped on site. The quantities and location where these substances were disposed of are unknown. During a 1986 off-site reconnaissance by Malcolm Pirnie, Inc., approximately 10 drums were reported along the eastern access road. The contents and condition of these drums are unknown.

There have been a number of fires beneath the surface of the landfill which recurred periodically, venting smoke from the landfill surface. In July 1987, the NJDEP recommended that a closure plan be submitted for the Keegan Landfill Site. Neglia Engineering Associates met with the NJDEP and recommended that the areas of recently extinguished fires be covered with 2 feet of cover. At the time of the NUS Corporation Region 2 FIT site inspection, there was no evidence of any burning waste or drums on site.

Ref. Nos. 1, 2, 4, 21

2.3 GROUNDWATER ROUTE

The Keegan Landfill Site lies within the Hackensack Meadowlands, a large wetlands area formed by the action of glaciers and fluctuations in ocean water levels. The bedrock in the Hackensack River Basin is a part of the Newark Group of Late Triassic Age. Underlying the Keegan Landfill Site is the Brunswick Formation, which forms the bedrock throughout most of the Hackensack River Basin. The Brunswick Formation is composed of mudstone, siltstone, sandstone, and conglomerate. In the southern part of the basin, mudstone is the dominant lithology, and the deposits gradually become coarser grained northward. The Brunswick Formation is the most important bedrock aquifer in the

basin. The water table in this area is assumed to be at or near the ground surface. Groundwater in the Brunswick Formation occurs in a network of interconnected openings formed along joints and fractures. Groundwater flow in the area is likely to be southeast toward the Hackensack River. Unconsolidated deposits overlying the Brunswick Formation consist of till, varved silt and clay, alluvium, sand, and gravel. Small quantities of groundwater are stored in the till which overlies the bedrock.

Deposits of varved silt and clay, such as the lake beds that overlie bedrock and till in most of the meadows, have a poor permeability of approximately 10^{-5} to 10^{-7} cm/sec and impede the movement, discharge, and recharge of water. Stratified drift deposits of varved silt and clay, as much as 300 feet thick in the meadows, occur in two troughs which parallel the sides of the basin. The Keegan Landfill Site lies within the western trough.

Groundwater from the Brunswick Formation in the lower part of the basin is hard to very hard and highly mineralized. In this area the water quality in both the Brunswick and unconsolidated deposits is influenced by the water quality of the Hackensack River and Newark Bay. Both the surface water and groundwater quality in the lower area is influenced by the disposal of large quantities of sewage and industrial wastes in the Hackensack Meadows. High concentrations of chloride make the water in the lower Hackensack River unsuitable for municipal and industrial processes, although it is usable for cooling purposes.

There is no potable water collected from groundwater in the area. All municipalities within 3 miles of the site draw their drinking water from the Wanaque Reservoir, located in northern Passaic County. There are 10 industrial wells and one recreational well within 3 miles of the site, the nearest being approximately 0.7 mile southwest of the site. This well and nine others withdraw water from the Brunswick Formation. One well located 1.5 miles southeast of the site withdraws water from the stratified glacial drift. The recreational well is operated by the Essex County Parks Department, which is used to replenish water in a pond in Branch Brook Park located approximately 2.7 miles northwest of the site. This well information is summarized in Table 1. There is a potential for groundwater contamination since the landfill is unlined and reports have suggested that chromate and bichromate slurry have been deposited at the site. However, groundwater in the area is not used for potable water, but only for industrial and recreational purposes.

The net annual precipitation in the area is approximately 12 inches.

Ref. Nos. 2, 7, 8, 9, 10, 11, 12, 13, 24, 25

TABLE 1
GROUNDWATER USAGE
WITHIN 3 MILES OF KEEGAN LANDFILL
KEARNY, NEW JERSEY

<u>Name</u>	<u>Distance From Site (Miles)</u>	<u>Direction From Site</u>	<u>Well Depth (ft)</u>	<u>Aquifer</u>	<u>Use</u>
American Ref. Company	1.5	SE	35	Stratified drift	Industrial
V. H. Swenson Co., Inc.	0.75	N	400	Brunswick Formation	Industrial
Ronson Metals Corp.	1.75	S	300	Brunswick Formation	Industrial
Ronson Metals Corp.	2.0	S	165	Brunswick Formation	Industrial
Public Service Electric	2.0	SW	216	Brunswick Formation	Industrial
New Jersey Bell Telephone	2.25	SW	215	Brunswick Formation	Industrial
Grand Union Company	2.7	N	300	Brunswick Formation	Industrial
International Minerals and Chemicals	2.0	NNW	400	Brunswick Formation	Industrial
Honeycomb Plastics Corp.	0.7	SW	500	Brunswick Formation	Industrial
Honeycomb Plastics Corp.	0.7	SW	700	Brunswick Formation	Industrial
Essex County Parks	2.7	NW	450	Brunswick Formation	Recreation

2.4 SURFACE WATER ROUTE

The Keegan Landfill Site is located in the surface waters of the Hackensack Meadowlands. The site is relatively flat with a few small mounds of less than 10 feet in height which were probably caused by the deposition of wastes on site. It is bounded on the northeast by a wetlands lake approximately 15 acres in size. There is an unnamed creek crossing the site, and Frank Creek which originates on site. These two creeks converge south of the site, and flow into the Passaic River approximately 1 stream mile south of the site. The Passaic River drains into the Hackensack River which flows into Newark Bay, and eventually connects with the Atlantic Ocean. Both the Passaic River and Newark Bay are used for navigational purposes. The Hackensack River lies approximately 2.0 miles east of the site and is used for navigational purposes by commercial and recreational vessels. These two rivers are tidal in nature. The 1-year 24-hour rainfall in the area is approximately 2.75 inches. There are no surface water intakes on the Passaic River, the Hackensack River, or Newark Bay within 3 miles downstream of the site. There are no habitats of federally endangered species within 1 mile of the site.

There is a potential for surface water to be contaminated by any hazardous substances present on the site, since the site is located in a wetlands area. The site is also crossed by an unnamed creek and Frank Creek, which drain into the Passaic River and eventually into the Hackensack River and Newark Bay. Therefore, hazardous substances present on site could easily migrate from the site.

On April 25, 1989, NUS Corporation Region 2 FIT personnel collected seven surface water samples and six sediment samples to determine the presence or absence of TCL substances on site, and the possibility for migration of any present TCL substances. Sample locations are shown in Figure 3 of Section 3.0 and analytical data is discussed in Section 4.0 of this report. Results of this sampling indicate the presence of several semivolatile compounds, chromium, lead, mercury, and PCBs in on-site sediments. Several inorganic compounds including chromium, lead, and mercury were detected in on-site surface water samples. These inorganics were detected in higher concentrations in the downstream surface water sample NJG3-SW5 than in the upstream samples NJG3-SW6 and NJG3-SW7. Since chromate and bichromate slurry were reported to have been disposed of on site, chromium contamination of surface waters in Frank Creek may be attributed to the site. During the site inspection, a dead fish was observed in the unnamed creek. Also noted on site was an oily sheen in Frank Creek near sample locations NJG3-SW5 and NJG3-SED5.

Ref. Nos. 1, 2, 4, 5, 6, 7, 8, 9, 13, 22, 24, 27

2.5 AIR ROUTE

During the April 25, 1989 site inspection of the Keegan Landfill Site, no air readings above background conditions were detected on the Organic Vapor Analyzer or the HNu photoionization detector. There are no National Historic Sites within view of the Keegan Landfill Site. There have been several underground fires reported at the site; however, there is no indication of a potential for release of hazardous substances to the air.

Ref. Nos. 1, 2

2.6 ACTUAL HAZARDOUS CONDITIONS

A dead fish was observed in the unnamed creek during the NUS Region 2 FIT site inspection on April 25, 1989. Also noted on site was an oily sheen in Frank Creek near sample locations NJG3-SW5 and NJG3-SED5. Chromium contamination of surface water was found in Frank Creek. PCBs, lead, and mercury were also detected in sediments in Frank Creek, the unnamed creek, and the wetlands lake. There is a potential for direct contact with hazardous substances on site since the site is not fenced. No other actual hazardous conditions pertaining to environmental contamination have been documented. Specifically:

- Contamination has not been documented either in organisms in a food chain leading to humans or in organisms directly consumed by humans.
- There have been no documented observed incidents of direct physical contact with hazardous substances at the landfill involving a human being or a domestic animal.
- There have been no documented instances of damage to flora (e.g., stressed vegetation) that can be attributed to hazardous materials on site.
- There is no documented contamination of a sewer or storm drain.
- There is no direct evidence of a release of a substance of concern from the facility to groundwater.
- There is no threat of explosion on site, although there is a fire hazard. There have been numerous underground fires reported on site, most recently in June and July of 1987.

Ref. Nos. 1, 2

932520285



LEGEND

- SURFACE WATER SAMPLE
- SEDIMENT SAMPLE

ALL SAMPLE NUMBERS
PRECEDED BY NJG3

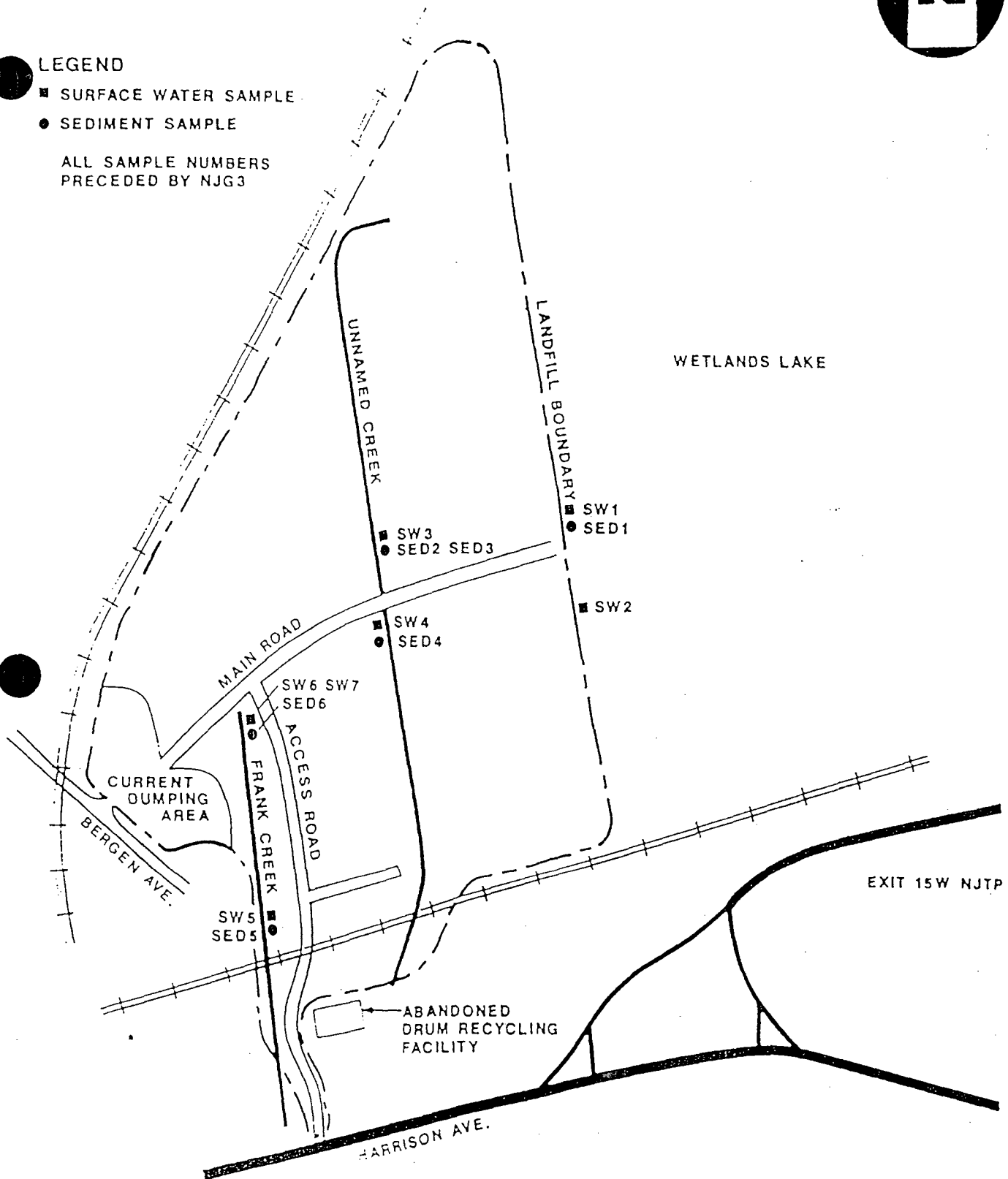


FIGURE 3

SAMPLE LOCATION MAP

KEEGAN LANDFILL, KEARNY, N.J.



4.0 SITE INSPECTION SAMPLING RESULTS

NUS Corporation conducted a site inspection of Keegan Landfill on April 25, 1989, at which time seven surface water samples and six sediment samples were collected. These samples were collected to determine the presence or absence of TCL substances on site. Sample locations are shown in Figure 3, Section 3.0. The results of the analyses for the sediment and surface water samples are summarized in Tables 2 and 3. A complete list of sample parameters and analytical results is presented in Reference No. 22.

Several additional semivolatile compounds were detected in sediment samples NJG3-SED1, NJG3-SED3, NJG3-SED5, and NJG3-SED6, but were below contract required Quantitation Limits (CRQL). The downstream sample NJG3-SED5 was found to contain greater concentrations of several semivolatile compounds, lead, and mercury than the upstream sample NJG3-SED6. ~~Sediment samples NJG3-SED1, SED3, SED5, and SED6 also contained PCBs.~~ Sediment samples NJG3-SED4 and NJG3-SED5 also contained estimated concentrations of tetrachloroethane of 68 ug/kg and 17 ug/kg, respectively. Sediment sample NJG3-SED4 contained an estimated concentration of 100 ug/kg of xylenes. These volatiles were not detected in any of the other sediment samples.

Surface water samples NJG3-SW5 and NJG3-SW6, 7, collected from Frank Creek, contained inorganic concentrations from 2 to 35 times the concentrations found in the other surface water samples collected. The downstream surface water sample NJG3-SW5 contained concentrations of inorganic compounds as much as five times the concentrations found in upstream samples NJG3-SW6, 7.

Ref. Nos. 2, 22

TABLE 2 - SUMMARY OF ANALYSES FOR SEDIMENT SAMPLES

Parameter/unit	Sediment Sample			
	Sed 1	Sed 4	Sed 5	Sed 6
Phenanthrene ug/kg			5300	4800 NS no/kg
Fluoranthene ug/kg			15,000	4700 10,000/100
Pyrene ug/kg			9600	3500 10,000, 100
Benzo (a) anthracene ug/kg			*6900	2000 4/500
Chrysene ug/kg			7300	2400 40/500
Benzo(b)fluoranthene ug/kg			5800	2300 NS
Benzo(k)fluoranthene ug/kg			3700	1100 4+500 NS
Indeno (1,2,3-cd) pyrene ug/kg			3200	1600 4/500
Benzo(a)pyrene ug/kg			*4400	2000 .66/100
Benzo(g,h,i)perylene ug/kg			2700	2000 NS
Aroclor -1254 ug/kg	*2600 E		*1400 E	*4200 E 2/500
Aroclor -1260 ug/kg	*2400 E		*1600 E	
Mercury mg/kg	0.7	2.6	8.7	2.3 270
Lead mg/kg	305	1020*	1180*	479 600
Chromium mg/kg	13.3	93.6	114	116

E - estimated value

TABLE 3 - SUMMARY OF ANALYSES FOR SURFACE WATER SAMPLES

Parameter/unit	Surface Water Sample	
	SW-5	SW-6, SW-7
Aluminum ug/L	2170 E	444 E, 467 E
Barium ug/L	445	211, 212
Chromium ug/L	21.6 E	4.6*, 4.2*
Copper ug/L	95.2 E	
Iron ug/L	11,900	2550, 2630
Lead ug/L	159	43.9, 42.8
Manganese ug/L	484	224, 220
Mercury ug/L	1.2	
Zinc ug/L	339	45.4, 47.7

* - estimated value, compound present below CRDL, but above IDL.

E - estimated value

blank space - compound analyzed for but not detected

932520287

5.0 CONCLUSIONS AND RECOMMENDATIONS

This site poses a potential threat of contamination of surface waters. Hazardous substances reported as being disposed of on site are chromate and bichromate slurry, organic waste, and pigment waste. Analyses of surface water samples collected at the Keegan Landfill Site indicate concentrations of chromium significantly greater in a downstream surface water sample than in an upstream sample. Semivolatile contaminants were detected in higher concentrations in the downstream sediment sample of Frank Creek than in the upstream sediment samples. However, the downstream samples, NJG3-SW5 and NJG3-SED5, were collected next to a railroad trestle; therefore, these contaminants may possibly be attributed to another source.

Groundwater in the area is not used for potable water, but solely for industrial use. The site is located in surface water, but there are no surface water intakes within 3 miles downstream of the site. The Hackensack River, located approximately 2.0 miles east of the site, is used for navigation by commercial and recreational vessels.

There is a potential for direct contact with hazardous substances present on site, since the site is not fenced. Based on the recreational targets from the Hackensack River and the potential for direct contact, this site is recommended for a **MEDIUM PRIORITY** for further action. A fence should be installed around the site to limit access to the landfill. Additional sediment and surface water samples should be collected from Frank Creek to determine if the contaminants present are attributable to the site or another source.

Ref. Nos. 1, 2, 4, 8, 10, 11, 22, 25, 26

6.0 REFERENCES

1. Preliminary Assessment, Malcolm Pirnie, Inc. May 5, 1986.
2. Field Notebook No. 0381, Keegan Landfill, TDD No. 02-8810-75, Site Inspection, NUS Corporation Region 2 FIT, Edison, New Jersey. December 19, 1988.
3. General Sciences Corporation, Graphical Exposure Modeling System (GEMS), Landover, Maryland, 1986.
4. Three-Mile Vicinity Map for Keegan Landfill, based on U.S.G.S. Topographic Maps 7.5 Minute Series, "Orange, N.J. Quadrangle," 1955 photorevised 1981, "Weehawken, N.J. Quadrangle," 1967 photorevised 1981, "Elizabeth, N.J. Quadrangle," 1967 photorevised 1981, and "Jersey City, N.J. Quadrangle," 1967 photorevised 1981.
5. U.S. Department of the Interior, Federal Water Pollution Control Administration, Report on the Quality of the Interstate Waters of the Lower Passaic River and Upper and Lower Bays of New York Harbor, November 1969.
6. New Jersey Department of Conservation and Economic Development, Hackensack Meadows Comprehensive Plan Technical Report No. 2A, Definition of the Meadows, March 15, 1965.
7. County of Bergen, New Jersey, Office of the County Engineer Feasibility Study and Report of a Hackensack River Dam. October 1966.
8. Uncontrolled hazardous waste site ranking system, A user's manual, 40 CFR Part 300, Appendix A, 1986.
9. Suszkowski, Dennis J. Sedimentology of Newark Bay, New Jersey: An Urban Estuarine Bay, June 1978.
10. Telecon Note: Conversation between Ms. Carole Schmidt, Kearny Water Department, and David Heim, NUS Corp., July 6, 1989.
11. Telecon Note: Conversation between Mr. Vince Bucci, Essex County Parks Department, and David Heim, NUS Corp., July 7, 1989.
12. New Jersey Geological Survey, Department of Environmental Protection, Bedrock Map of the Hackensack Meadows, 1959, revised 1962.
13. New Jersey Department of Environmental Protection (NJDEP), Bureau of Water Allocation, Water Withdrawal Points and NJGS Case Index Site within 5.0 miles of latitude 40° 44' 53", longitude 74° 06' 48", October 19, 1988.
14. Letter from Edward J. Londres, New Jersey Department of Environmental Protection, to Henry J. Hill, Mayor of Kearny, July 2, 1987.
15. Letter from James A. Rogers, James C. Anderson Associates, Inc., to Henry Hill, Mayor of Kearny, July 7, 1987.
16. Letter from Joseph E. Neglia, Town Engineer, Town of Kearny, to Mayor and Council, Town of Kearny, August 28, 1987.
17. Letter from Robert Ferraiuolo, Hudson Regional Health Commission, to Henry Hill, Mayor of Kearny, July 14, 1987.

6.0 REFERENCES (Cont'd)

18. Letter from Edward Grosvenor, Health Officer, Town of Kearny, to Henry Hill, Mayor of Kearny, July 21, 1987.
19. Letter from John P. Sarnas, Assistant Health Officer, Town of Kearny, to Henry Hill, Mayor of Kearny, July 23, 1987.
20. Letter from John A. Castner, NJDEP to John P. Sarnas, Assistant Health Officer, Kearny Department of Health and Environmental Protection, August 25, 1987.
21. Kearny Department of Public Health and Environmental Protection Memos regarding landfill fire dated June 25, 26, 29, 30 and July 1, 2, 6, 7, 8, 9, 10, 1987.
22. U.S. EPA Contract Laboratory Program, PEI Associates, Inc., and York Laboratories, Case No. 11834, Laboratory Analysis from NUS Corporation Region 2 FIT Site Inspection conducted on April 25, 1989.
23. New Jersey and National Registers of Historic Places, June 1, 1980.
24. Carswell, L.D. *Appraisal of Water Resources in the Hackensack River Basin, New Jersey*. U.S. Geological Survey Water Resources Investigations 76-74. June 1976.
25. Telecon Note: Conversation between Mr. Michael Beard, Kearny Health Department, and Gerald Gilliland, NUS Corp., April 20, 1989.
26. Telecon Note: Conversation between Lt. Ronald Johnstone, Kearny Police Department, and Gerald Gilliland, NUS Corp., April 25, 1989.
27. U.S. Department of the Interior. U.S. Fish and Wildlife Service, Atlantic Coast Ecological Inventory, New York (N.Y.-Conn.-N.J.), 1980.

Hackensack Meadowlands Development Commission

MEMORANDUM

To MEMO TO FILE
From Michael Kondratick Date March 6, 1972
Subject Sanitary Landfill Inspection Municipal Sanitary Landfill File , Part of HMDC Site #4

Weather: Rainy

(1) On the access road to the left , the site looks acceptable and cover adequate. On the right, previously used cells have not been covered at all.

(2) The area is totally engulfed with gulls and it is obvious that there is no proper daily cover. At the top of the crest of the landfill, there is a big cavity and there is evidence of oil being dumped, barrels are on the edge of the opening marked Western Electric. We must remember that Keegan is obligated under lease to take all industrial waste from the Town of Kearny. There is an area of 55 gal drums with an elevation of 35 or 45, that is just swimming with oil and 55 gallon drums. Both of the foregoing were photographed.

Michael Kondratick

/jo

932520291

Keegan landfill is a trash moonscape

Residents hoping plan to reopen dump fails

By Dan Rosenfeld
Journal staff writer

KEARNY — Half-burned mounds of yellowed paper and lunch meat remnants line the cavernous walls of a Keegan landfill garbage crater. "No Deposit, No Return" bottles and cans create a trash moonscape complete with a 10-foot deep valley larger than a hockey rink.

Backhoes cut these holes through layers of garbage to extinguish underground blazes fed from methane continually created by decaying food, yard clippings and other biological waste.

"Right now we're standing on 25 feet of garbage," said Thomas Marturano, Hackensack Meadowlands Development Commission director of Solid Waste.

The HMDC wants to reopen this 110-acre landfill and use the money to properly contain Keegan and nearby "1D" dumps which are leaking millions of gallons of contaminants annually into marshes and harbor. But hundreds of Kearny residents, the town government and a development company are trying to block the reborn dump.

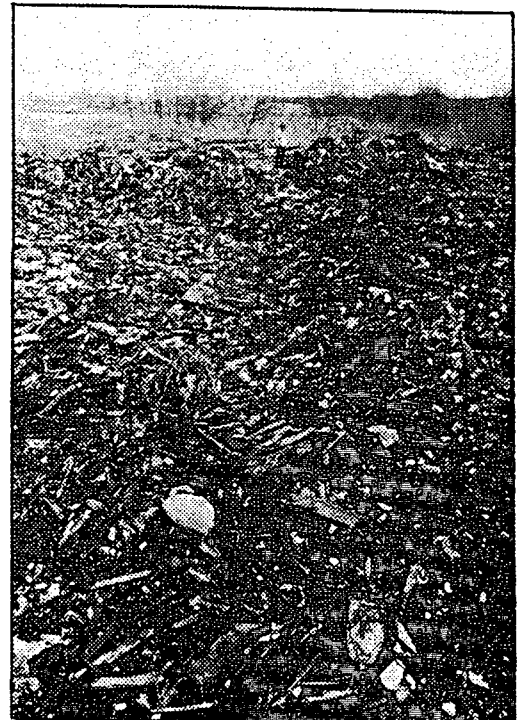
The HMDC board will vote April 22 on reopening the dump for non-recyclable construction debris which can't be sent to

See RESIDENTS — Page 5



Journal photos by Bill Bayer

The Hackensack Meadowlands Development Commission wants to reopen the 110 acre Keegan landfill (right), which along with the nearby "1D" dumps, is leaking millions of gallons of contaminants annually into marshes and areas such as the site pictured above.



Residents, environmentalists hope Keegan will stay shut

Continued from Page 1

incinerators. Items like sulphur-containing plaster-board and asbestos would be dumped at Keegan for 10 to 20 years or until the landfill reaches 100 feet tall.

New Jersey taxpayers would save about \$500 million with the reopened Keegan. Essex, Bergen and Hudson counties would be one step closer to trash self-sufficiency and no longer be forced to send garbage out of state at double Keegan's proposed price.

Opposition forces have vowed to block a working Keegan landfill in court. Residents' concerns range from the dump's atrophying effect on property values, to asbestos flying off the pile and another 200 garbage trucks per day.

The landfill is hidden by thick brush, which burned again last week. Rail lines frame the dump with the Gunnell Oval athletic fields just out of sight.

Keegan and HMDC records on the dump list an opening date of 1950s, but residents say

dumping began during WWII. This dump was created in a particularly unsanitary fashion. Heavy equipment ripped out soft marsh soil, allowing hundreds of thousands of tons of garbage to be thrown in.

The garbage line abuts the Kearny Freshwater Marsh, one of the most vibrant wetlands in the Hackensack Meadowslands. The edges of the marsh are stained brown with leachate which beats into a white froth when agitated by the wind.

Leachate, a toxic tea-colored stew of heavy metals and oxygen consuming minerals, strains the marsh. An estimated 65 million gallons of leachate annually runs into the marsh and moves its way up the foodchain into invertebrates, fish, blue herons, mice and hawks.

"These old landfills have great potential for wildlife," said Don Smith, HMDC chief conservationist. "But what are they being exposed to?"

People fish for carp off the dump's banks and continue to eat the contaminated catch despite health advisories.

The HMDC has just begun studying the effects of heavy metals on the local ecosystem. (A rabbit caught in a trap overnight recently was devoured by hawks before researchers could examine it.)

"The continuous flow of heavy metals into the marsh builds up and it can take only so much," Smith said.

Federal Environmental Protection Agency tests found lead, aluminum, barium, chromium, mercury and other heavy metals in the surface water. The sediments contain a potpourri of petroleum wastes and PCBs (poly chemicals, used in electrical transformers or some pesticides, that are known to cause cancer). Thousands of 55-gallon drums containing chromate and other toxic wastes were dumped at Keegan during the 1960s.

Frank Creek, a yellowish, green ditch field with putrid water, bisects the dump. The EPA has described Frank Creek as an open sewer, but at least one snapping turtle calls it home.

"Surface water samples col-

lected from Frank Creek contain inorganic concentrations from 2 to 35 times the concentrations found in the other surface water samples," according to the EPA Site Inspection Sampling Results. "The downstream surface water samples contained concentrations as much as five times the concentrations found in upstream samples."

Yet Keegan is not a static mound of trash. Anaerobic organisms digest biological waste raising the temperature inside a landfill to 190 degrees. Slowly that material is broken down, leaving a larger percentage of toxic metals, plastics and other items which will most likely last until the next ice age.

The growing acidity of local rainfall tears more metals out of the landfill. Trees try to take root in the landfill, but must latch on to garbage in order to remain upright.

"Trees can't send deep roots because the methane dissolves the oxygen in the subsoil," Marturano said.

Hudson Meadows Development Corporation, which holds a

lease on the property, wants to build a mixed-use development at Keegan which will include stores, office towers and a hotel. Next door to the luxury hotel site are coffin, port-a-toilet and garbage companies.

HMDC officials agree that building on the site is possible, but an approved development would require massive amounts of clean fill and remediation efforts.

The main environmental goal of any development would be containing the leachate. The first step would be digging a moat down to the watertable. This trench would encircle the landfill's perimeter.

The moat would then be filled in with a special clay called bentonite which would be trucked in from Wyoming. Bentonite, which is formed when volcanic ash is compressed over

centuries, can absorb huge amounts of water. The leachate could then be collected, pumped out and treated.

"We end up with a huge bathtub," Marturano said.

Sealing Keegan would cost \$30 million, which could be completely funded through reopening the landfill. Hudson Meadows officials have told the HMDC they too could raise the money with their project. The HMDC plan also calls for capturing the runoff from the "1D," which contains a 250,000-gallon waste-oil lake.

The heart of the battle remains one logical question put to the HMDC board by 60-year Kearny resident Bruce Wood. Should a town, just now casting off its 'Garbage City' US image, be forced to take yet another garbage dump?

REPLACEMENT WINDOW

21

22

Hartz Mountain – Hyatt Roller Bearing

VOLUME I

**PHASE III
REMEDIAL INVESTIGATION REPORT**

**HARTZ MOUNTAIN CORPORATION
ISRA CASE #93126**

PREPARED FOR:

**HARTZ MOUNTAIN CORPORATION
700 FRANK E. RODGERS BOULEVARD
HARRISON, NEW JERSEY**

PREPARED BY:

**METCALF & EDDY, INC.
P.O. BOX 1500
SOMERVILLE, NEW JERSEY**

JUNE 1996



Metcalf & Eddy
An Air & Water Technologies Company

932520296

interval corresponding to the depth of the catchbasin inverts. ~~The soil samples were analyzed for the PCB and PPM parameters.~~

Wastes generated during the Phase I - III investigation were disposed offsite at approved facilities in accordance with applicable regulations (Appendix 11). The sediments, soils, and demolition debris associated with the remediation of CB-CSS2 was disposed with soils excavated from the Chip Pit.

4.4.2 Former Aboveground Storage Tank Area (AOC-2)

A total of five (5) soil borings (B-1 through B-5) were advanced in this area during the Phase I RI using a Mobile B-53 drilling rig (Figures 6 and 9). Continuous split-spoon samples were collected from the ground surface to the water table (14-16 ft.). Samples were field screened using an FID OVA Model 128. Analytical samples were collected in each boring from the 6-inch interval directly above the water table.

~~These samples were analyzed for PPM, PCB, and TPHC.~~ An additional sample was collected from boring B-3 which exhibited the highest FID reading (7 ppm), and was analyzed for PP+40 parameters. The cuttings generated during this investigation were disposed off site at an approved facility (Appendix 11).

4.4.3 Former Hot-Oil Process System (AOC-3)

M&E personnel collected three (3) wipe samples from selected locations along the relict hot oil system piping in Building #7 and #8 during the Phase I RI (Figure 8). A rectangular opening was cut on the top of the remnant piping by Hartz personnel to provide sampling access to the piping interior. ~~The samples were analyzed for PCBs.~~

M&E personnel accessed and cleaned six (6) of the stormwater catchbasins during Phase I RI, and two during Phase III of the RI. Following cleaning, the catchbasins were visibly inspected for breaches and/or hydraulically tested in accordance with the procedures set forth in NJAC 7:26E-3.9. It was not possible to perform integrity tests on catchbasins CB-1, CB-3, or CB-4 due the configuration of the pipe inverts or, in the case of CB-4, the large volume of the structure. The majority of sediments were removed from CB-2, and although it was hydraulically tested, the observed bottom could not be structurally evaluated. Catch basin CB-8, which discharges to the CSS via sump pump, is not located in a process area and was free of oily sediments; therefore, it was not a concern with respect to potential contamination of surrounding soils. However, it did contain trash and debris which was removed to improve drainage. Catchbasin CB-CSS2 was addressed during Phase III of the RI and required removal with excavating equipment (Figure 8).

The catchbasin sediments recovered during the Phase I RI were drummed in 55-gallon containers. Samples were collected from CB-1, CB-2, CB-4, CB-6, and CB-7, which contained the majority of the sediments. Sediments from CB-3 were placed into drums from the other catchbasins while sediment removed from CB-4 during the Phase III was sampled/ disposed with the tunnel sediments. Catchbasin CB-5 was free of sediment. An ID #27 analysis was performed on the drummed material for waste classification as a prerequisite to disposal. Catchbasin CB-4 was sampled for the PP+40 parameters.

As per the NJDEP letter dated September 14, 1993, no sediment or soil sampling was required within or adjacent to the hydraulically sound catchbasins. However, as integrity tests could not be performed in catchbasins CB-1, CB-2, and CB-4, Hartz directed M&E to investigate the adjacent soils. One soil boring was advanced and one soil sample was collected adjacent to each of the three catchbasins at the depth

Phase I RI analytical results for environmental samples collected from sediments in CB-1, CB-2, CB-4, CB-6, and CB-7 indicate the presence of PPM, PCBs, and TPHC. The maximum total PCB concentration was detected in sample CB-7 (110 ppm). The other basins contained total PCB concentrations of 27.4 - 98 ppm. Antimony, cadmium, chromium, copper, lead, nickel, silver, and zinc were detected at concentrations in excess of the associated residential direct contact soil cleanup criteria (RDC) and non-residential direct contact soil cleanup criteria (NRDC) in one or more catchbasins. The TPHC concentrations ranged from 2,600 ppm in CB-4 to 17,000 ppm in CB-6. Sample CB-4, the only sample analyzed for VOCs and SVOCs, was free of these contaminants with respect to their regulatory thresholds. Soil samples collected from borings advanced adjacent to CB-2, CB-3, and CB-4 were free of targeted analytes at concentrations above regulatory concern.

Post-excavation and waste classification samples performed during the initial remediation of CB-CSS2 indicated the presence of residual TPHC and PCBs above the RDC and NRDC. Excavation of CB-CSS2 was repeated and results from post-excavation sample CSS2-P3-S1 indicate PCB concentrations above the RDC and NRDC. A summary of analytical results for the catchbasin samples are included in Tables 4-1-1 and 4-1-2.

5.1.2 Former AST Area (AOC-2)

No additional investigation has been performed in this AOC since the results of the Phase I RI indicated the absence of targeted parameters above the soil cleanup criteria. Phase I analytical results are summarized in Table 4-2-1.

5.0 ANALYTICAL/FIELD TESTING RESULTS AND DATA INTERPRETATION

5.1 Analytical/Field Testing Results

Summaries of the analytical and field testing results for each AOC are presented in the following sections. Please refer to Table 2-2 for a summary of the laboratory analyses performed on each sample in each AOC. A summary of average contaminant concentrations for each AOC is provided in Table 3; Table 2-2 provides a summary of samples containing contaminant concentrations above regulatory criteria. Laboratory analytical results are provided in Appendix 16.

5.1.1 Stormwater Catchbasins (AOC-1)

Field observations during Phases I - III of the RI indicated that seven of the nine catchbasins, CB-1, 2, 3, 4, 6, 8, and CB-CSS-2 were connected to the CSS (Figure 8). CB-5 is drained by a sump pump that discharges to the pavement south of Building #1. The discharge point for catchbasin CB-7 was not determined during the field investigation; however, the outflow pipe apparently continues northward below the corridor connecting Building #7 and Building #8. Eight of the nine catchbasins contained sediment which was removed during Phases I and III of the RI. Catchbasin CB-5 was free of sediment. Hydrostatic testing was performed at CB-2, CB-3, CB-5, CB-6, and CB-7; all were hydraulically sound. Catchbasin CB-1 could not be sealed due to oddly shaped invert, and CB-4 was over 10 feet deep; neither of these catchbasins were hydraulically tested; however, both were cleaned and inspected during the Phase III RI and contained no visible breaches. Catchbasin CB-CSS2 was excavated and backfilled and is no longer functional.

TABLE 4-1-1
ANALYTICAL SUMMARY OF BASIN CONTENTS & ADJACENT SOIL SAMPLING RESULTS (PHASE I)
STORMWATER CATCHBASINS (AOC-1)
HARTZ MOUNTAIN CORPORATION
HARRISON, NEW JERSEY

SAMPLE ID	Residential Direct	Non-Residential	Impact to	CB-1	CB-2	CB-4	CB-6	CB-7	CB-1S(SB)	CB-2S(SB)	CB-4S(SB)
SAMPLE DEPTH	Contact Soil:	Direct Contact Soil:	GW Soil	12/03/93	12/03/93	12/03/93	12/03/93	12/03/93	5.0-5.5'	4.5-5.0'	5.0-5.5'
SAMPLE DATE	Cleanup Criteria*	Cleanup Criteria*	Cleanup Criteria	E333725	E333723	E333724	E333726	E333722	E410583	E410584	E410585
LAB ID											
PARAMETER											
METALS (PPM)											
Antimony	14	340	NS	<11	<9.8	<9.8	30	38	<7.1	<6.7	<6.6
Arsenic	20	20	NS	5.3	4.0	2.7	6.2	15	2.2	3.9	1.3
Beryllium	1	1	NS	<0.93	<0.82	<0.82	<0.89	<1.0	0.60	0.97	<0.55
Cadmium	1	100	NS	11	5.0	5.8	25	15	<0.59	<0.56	<0.55
Chromium	NS	NS	NS	160	130	150	180	500	12	24	8.6
Copper	600	600	NS	230	200	200	1200	710	12	21	6.1
Lead	100	600	NS	760	670	830	2400	1300	<12	57	<11
Mercury	14	270	NS	0.54	0.70	0.44	0.77	2.9	<0.11	0.20	<0.10
Nickel	250	2400	NS	99	110	81	110	590	7.4	19	5.1
Selenium	63	3100	NS	<19	<16	<16	<18	<20	<12	<11	<11
Silver	110	4100	NS	<5.6	<4.9	<4.9	130	<6.1	<1.2	<1.1	<1.1
Thallium	2	2	NS	<0.93	<1.6	<0.82	<0.89	<1.0	<1.2	<1.1	<1.1
Zinc	1500	1500	NS	2800	680	900	1600	2300	24	81	15
Corrosivity	N	N	N	8.4 NC	9.2 NC	7.8 NC	8.0 NC	8.8 NC	NA	NA	NA
Cyanide Reactivity	N	N	N	<1.5	<1.5	<1.5	<1.5	<1.5	NA	NA	NA
Cyanide Total	N	N	N	NA	NA	<1.0	NA	NA	NA	NA	NA
Ignitability	N	N	N	>200 F	>200 F	>200 F	>200 F	>200 F	NA	NA	NA
Petroleum Hydrocarbons	N	N	N	6500	9100	2600	17000	11000	NA	NA	NA
Phenolics, Total	N	N	N	NA	NA	<2.5	NA	NA	NA	NA	NA
Total Percent Solids	N	N	N	54 %	61 %	61 %	56 %	49 %	85 %	90 %	91 %
Sulfide Reactivity	N	N	N	170	<50	<50	160	<50	NA	NA	NA
PCBs (PPB)	490	2000	100,000								
Arochlor 1016	NS	NS	NS	320 U	290 U	29 U	310 U	350 U	21 U	19 U	19 U
Arochlor 1221	NS	NS	NS	120 U	100 U	10 U	110 U	130 U	7.4 U	7.0 U	6.9 U
Arochlor 1232	NS	NS	NS	260 U	230 U	23 U	240 U	280 U	16 U	15 U	15 U
Arochlor 1242	NS	NS	NS	180 U	160 U	16 U	170 U	190 U	11 U	11 U	11 U
Arochlor 1248	NS	NS	NS	55000	8800	IND	18000	110000	8.6 U	8.1 U	8.0 U
Arochlor 1254	NS	NS	NS	16000	IND	15000	7200	220 U	13 U	12 U	12 U
Arochlor 1260	NS	NS	NS	2700	3400	25 U	2200	310 U	18 U	17 U	17 U

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TABLE 4-1-2
ANALYTICAL SUMMARY OF POST-EXCAVATION SOIL SAMPLES (PHASE III)
COLLECTED FROM CATCH BASIN CSS-2 (AOC-1)
HARTZ MOUNTAIN FACILITY
HARRISON, NEW JERSEY

SAMPLING LOCATION:	RESIDENTIAL	NON-RESIDENTIAL	IMPACT TO	CSS-2-1	CSS-2-3	CSS2-P3-S1	CSS2-P3-S2	CSS2-P3-S3	CSS2-P3-S4	CSS2-P3-S5	TB	FB
SAMPLING DEPTH:	DIRECT CONTACT	DIRECT CONTACT	GROUNDWATER	6.0' Center	6.0' So. Wall							
SAMPLING DATE:	SOIL CLEANUP	SOIL CLEANUP	SOIL CLEANUP	09/19/95	09/19/95	12/28/95	12/28/95	12/28/95	12/28/95	12/28/95	12/28/95	12/28/95
CUTEST SAMPLE ID:	CRITERIA(1)	CRITERIA (2)	CRITERIA(3)	E8490-3	E8490-4	E8771-7	E8771-8	E8771-9	E8771-10	E8771-11	E8771-6	E8771-5
CBs (mg/kg)	0.49	2	50								(ug/L)	(ug/L)
Proctor 1016				0.019 U	0.019 U	0.02 U	0.021 U	0.021 U	0.021 U	0.02 U	NA	0.23 U
Proctor 1221				0.007 U	0.007 U	0.0071 U	0.0074 U	0.0076 U	0.0075 U	0.0071 U	NA	0.19 U
Proctor 1232				0.015 U	0.015 U	0.016 U	0.016 U	0.017 U	0.016 U	0.016 U	NA	0.054 U
Proctor 1242				0.011 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	NA	0.025 U
Proctor 1248				0.058 U	0.02 U	0.023 U	0.0456 U	0.022 U	0.027 U	0.0174 U	NA	0.4 U
Proctor 1254				0.012 U	0.012 U	0.012 U	0.013 U	0.013 U	0.013 U	0.012 U	NA	0.2 U
Proctor 1260				0.017 U	0.017 U	0.026 U	0.029 U	0.0731 U	0.044 U	0.0543 U	NA	0.31 U
METALS (mg/kg)											(ug/L)	(ug/L)
Antimony	14	340	NS	6.7 U	6.7 U	6.8 U	7.1 U	7.2 U	7.1 U	6.8 U	NA	5 U
Arsenic	20	20	NS	1.5	1.4	2.2	1.2	1.9	1.9	1.4	NA	5 U
Beryllium	1	1	NS	0.56 U	0.56 U	0.56 U	0.59 U	0.6 U	0.59 U	0.66	NA	5 U
Cadmium	1	100	NS	0.56 U	0.56 U	0.56 U	0.59 U	0.6 U	0.59 U	0.56 U	NA	4 U
Chromium	NS	NS	NS	5.8	5.9	6.3	7.1	10.2	6.4	7.5	NA	10 U
Copper	600	600	NS	6.4	6.5	5.5	3.9	19.3	5.4	10.7	NA	25 U
Lead	400(4)	600	NS	11 U	11 U	11 U	12 U	12 U	12 U	11 U	NA	3 U
Mercury	14	270	NS	0.11 U	0.093 U	0.1 U	0.13 U	0.12 U	0.12 U	0.11 U	NA	0.2 U
Nickel	250	2400	NS	6.5	6.4	7.2	5.8	15.5	7.4	8.3	NA	40 U
Selenium	63	3100	NS	11 U	11 U	11 U	12 U	12 U	12 U	11 U	NA	5 U
Silver	110	4100	NS	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	NA	10 U
Thallium	2	2	NS	1.1 U	1.1 U	0.56 U	0.59 U	0.6 U	0.59 U	1.1 U	NA	5 U
Zinc	1500	1500	NS	16	17	17.6	26	62.5	39.7	30.7	NA	20 U
NET CHEMISTRY OR MISC:												
Petroleum Hydrocarbons (mg/kg)	NS	NS	NS	31	20000	8820	8550	4860	6810	5200	NA	0.5 U
Solids, Percent (%)	NS	NS	NS	90	90	88.5	84.9	83.1	84.2	88.7	NA	NA

mg/kg = milligrams per kilogram (parts per million - PPM); ug/L = micrograms per Liter (parts per billion - ppb)

1) RDC Criteria are based on NJDEP 8 February 1994 Residential Contact Soil Cleanup Criteria.

2) NRDC Criteria are based on NJDEP 8 February 1994 Non-Residential Contact Soil Cleanup Criteria.

3) IGW Criteria are based on NJDEP 8 February 1994 Impact to Groundwater Soil Cleanup Criteria.

4) Revised July 20, 1994

Shaded area indicates detection is above one or more of the criteria levels.

NS = No Standard

J = An estimated value below method detection limit.

U = Undetected

B = Indicates that analyte is found in associated method blank.

ND = Not Detected

N = Presumptive evidence of a compound.

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Franklin Burlington Plastics

02-9002-24-SI

REV. NO. 0

FINAL DRAFT
SITE INSPECTION REPORT
FRANKLIN PLASTICS CORP.
VOLUME 1 OF 2
PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-9002-24
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

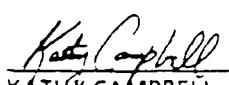
SEPTEMBER 17, 1990

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:



DAVE GRUPP
PROJECT MANAGER



KATHY CAMPBELL
SITE MANAGER

REVIEWED/APPROVED BY:



RONALD M. NAMAN
FACILITY OFFICE MANAGER

PART V: HAZARD ASSESSMENT

GROUNDWATER ROUTE

1. Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.

Analytical results from groundwater samples collected in June 1987 indicate a potential release of contaminants to the groundwater. Groundwater flow is reportedly westerly toward the Passaic River. Compounds detected in on-site monitoring wells downgradient of potential waste sources include bis(2-ethylhexyl) phthalate (130 ppb), chloroethane (13 ppb), Aroclor 1242 (15 ppb), arsenic (12 ppb), copper (360 ppb), lead (83 ppb), and zinc (280 ppb). Franklin Plastics Corp. utilizes bis(2-ethylhexyl) phthalate as a plasticizer in its manufacturing process. Bis(2-ethylhexyl) phthalate, arsenic, copper, lead, and zinc were also among compounds detected in soil samples collected in July 1987 by Recon Systems, Inc.

Monitoring Well No. 1 (MW1) was originally intended to provide upgradient data; however, bis(2-ethylhexyl) phthalate, lead, and petroleum hydrocarbons were detected in the MW1 sample, suggesting that MW1 may not be truly upgradient to all waste source areas. Therefore, a release of contaminants to groundwater cannot be definitely concluded. Monitoring Well No. 6, located east of the manufacturing building and north of the stained soil area, may be a truer background or upgradient monitoring well.

Ref. Nos. 13, 24

2. Describe the aquifer of concern; include information such as depth, thickness, geologic composition, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.

The aquifer of concern is the Brunswick Formation of the Newark Group which underlies the Newark area, including the City of Kearny. This formation consists of soft, reddish shale and red sandstone. In the vicinity of the site the Brunswick Formation is found at 50 feet below grade. The strata have generally been tilted northwestward, with the ridges trending northeastward. In the Newark area, the total thickness of these Triassic age rocks is estimated to be between 6,000 and 7,000 feet.

Groundwater movement and storage in the Brunswick Formation is primarily due to the extensive fracturing of the rocks of which it is composed. Though the cracks intersect so as to allow freedom of movement in all directions, water may be inhibited in traveling along certain paths by the size and capacity of the fractures.

In the vicinity of the site, the bedrock is found at approximately 50 feet below ground surface and is overlain by an estimated 30 feet of sand/silt, 10 feet of dense sand and gravel, and 5 feet of clayey silt, topped by 5 feet of urban fill. Sand and gravel are the most permeable of these geologic materials; the permeability associated with this soil type is 10^{-3} to 10^{-5} cm/sec. The water table is estimated to be at approximately 5 feet. Due to the close proximity of the Passaic River, which is tidal for its last 17 miles from Dundee Dam to Newark Bay, the possibility of salt water intrusion is increased. Groundwater flow is believed to be in a westerly direction toward the Passaic River.

Ref. Nos. 9, 12, 20, 21, 22, 33, 34

3. Is a designated sole source aquifer within 3 miles of the site?

Franklin Plastics Corp. is located in Kearny, Hudson County, New Jersey. There are no designated sole source aquifers within 3 miles of the site. The nearest sole source aquifer is the Buried Valley Aquifer System which is located more than 3 miles from the site.

Ref. Nos. 10, 11, 15

Report No.: 8003-447
Work Assignment No.: 038-2JZZ
Contract No.: 68-W9-0051
September 20, 1995
Updated: September 29, 1995
Volume 1 of 3
Rev. No.: 1

Mr. Joseph Hudek
Pre-Remedial WAM
U.S. Environmental Protection Agency
Region II - Environmental Services Division
Edison, New Jersey 08837

RE: Franklin Plastic Site Inspection Prioritization Evaluation

Dear Mr. Hudek:

This following is a summary of the Site Inspection Prioritization evaluation of the Franklin Plastic site (CERCLIS ID No. NJD011121589) (Ref. No. 1).

General Description and Site History

The Franklin Plastic (FP) site is located along the Passaic River in Kearny, New Jersey. FP occupies approximately 8 acres in a mixed industrial/commercial portion of Kearny. The site is bounded to the west by the Passaic River, to the east by Passaic Avenue, to the north by a retail/warehouse complex, and to the south by industrial/manufacturing businesses (Ref. No. 2, pp. 22, 391). FP is a privately owned, active manufacturing facility which has been operating under the name Franklin Plastics Corp. from 1976 to the present. Congoleum Corporation/Floor Covering Division (CC/FD) owned the property from 1946 to 1974; CC/FD manufactured asphalt and/or vinyl tile on the premises. Refer to Figures 1 and 2 for a Site Location Map and Site Map, respectively (Ref. No. 2, p. 22).

FP receives plastic resin as a solid or powder, then adds pigment and varying amounts of plasticizer to the customer's specifications. The final product is PVC pellets, which are sold to individual customers for conversion into end products (Ref. No. 2, p. 22). FP is permitted to discharge noncontact cooling water to the Passaic River under New Jersey Pollutant Discharge Elimination System (NJPDES) Permit No. NJ0002194 (expires 3/31/97). FP's NJPDES Permit allows for a maximum discharge of 15,000 gallons per day (gpd) into the Passaic River via one outfall pipe located at the southwest corner of the property. Noncontact cooling water from the mixer jacket and roller mills, overflow from the cooling tower, and indoor trenches from the facility drain into a common open sump pit. The sump pit is divided into two sections; the first section is used for settling, while the second section is discharged into the Passaic River via the outfall pipe. In 1985 sample results from a Compliance Evaluation Inspection indicated that FP violated its NJPDES permit by exceeding limitations on chromium and zinc. The open sump pit is concrete lined and is directly connected to the outfall pipe on the Passaic River (Ref. Nos. 2, p. 7; 3; 4).

In January 1980 the U.S. Environmental Protection Agency (USEPA) performed a Preliminary Assessment of the FP site. The presence of leaking and/or overflowing drums was noted, the locations of which were unspecified. A USEPA contractor on-site reconnaissance in April 1990 discovered three areas of abandoned drums along the Passaic River. The drums were in poor condition; some drums were partially buried. The contents of the drums appeared to be crumbled pieces of tile. Solidified sludge from the vinyl tile

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Summary

The Franklin Plastics (FP) site is located along the Passaic River in Kearny, New Jersey. FP occupies approximately 8 acres in a mixed industrial/commercial portion of Kearny. The site is bounded to the west by the Passaic River, to the east by Passaic Avenue, to the north by a retail/warehouse complex, and to the south by industrial/manufacturing businesses. FP receives plastic resin as a solid or powder, then adds pigment and varying amounts of plasticizer to the customer's specifications. The final product is PVC pellets, which are sold to individual customers for conversion into end products.

As part of the ECRA Investigation of the FP facility, Recon Systems Inc. collected groundwater samples and soil samples in June 1987 and June 1990. ~~The analytical data from the June 1987 sampling event indicated the presence of Aroclor 1242, bis(2-ethylhexyl) phthalate, chloroethane, arsenic, copper, lead, and zinc.~~ The analytical data from the June 1990 sampling event indicated the presence of arsenic, beryllium, copper, lead, and zinc. The analysis of the June 1987 soil samples indicated the presence of bis(2-ethylhexyl) phthalate, butylbenzyl phthalate, di-n-butyl phthalate, di-n-octyl phthalate, n-nitrosodiphenylamine, 1,1,1-trichloroethane, 1,1-dichloroethene, methylene chloride, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, and zinc. The analysis of the June 1990 soil samples indicated the presence of antimony, cadmium, chromium, copper, lead, and zinc. The QA/QC for these samples is unknown. Also, due to the lack of an adequate background soil sample and background groundwater sample, it is not possible to determine if these contaminants are present at levels above background.

As part of the 1990 EPA Site Inspection of the FP facility, soil samples and surface water/sediment samples were collected. The analysis of the surface water sample collected from a NJPDES-permitted outfall pipe on the Passaic River indicated the presence of chloroform, cadmium, copper, lead, and zinc. As a result, a release to surface water via direct observation is documented. The analysis of the aqueous sample collected from the sump pit indicated the presence of chloroform, cadmium, copper, lead, and zinc. The analysis of the sediment sample collected from the sump pit indicated the presence of butylbenzyl phthalate, di-n-octyl phthalate, bis(2-ethylhexyl) phthalate, antimony, arsenic, beryllium, cadmium, copper, chromium, lead, mercury, nickel, and zinc. The analysis of the soil samples indicated the presence of 2-butanone, 4-methyl-2-pentanone, dibenzofuran, di-n-butyl phthalate, butylbenzyl phthalate, di-n-octyl phthalate, bis(2-ethylhexyl) phthalate, antimony, arsenic, cadmium, copper, chromium, lead, mercury, nickel, and zinc. The analysis of the composite waste source sample (NJEP-S2) indicated the presence of di-n-butyl phthalate, butylbenzyl phthalate, bis(2-ethylhexyl) phthalate, cadmium, copper, chromium, lead, mercury, nickel, silver, and zinc. Although surface water and sediment samples were collected, none were collected from the Passaic River. Also, due to the lack of an adequate background sample it is not possible to determine if these contaminants are present at levels above background. Available documentation does not indicate that a release to air has occurred from the site. No readings above background were detected with an HNu photolionization detector during the EPA on-site reconnaissance and sampling event.

No residents within four miles of the site utilize groundwater as their source of potable water. These residents obtain their drinking water from the Wanaque Reservoir, which is not located along the 15-mile surface water pathway. The proximity of the site to a wellhead protection area cannot be determined since wellhead protection areas are not delineated in the State of New Jersey. Along the surface water pathway, the Passaic River, Newark Bay, and the Kill Van Kull are classified as SE3 by the NJDEP (where Class SE3 waterbodies are waters primarily for secondary contact recreational purposes). There are no surface water intakes along the surface water pathway of the site. The Passaic River, Newark Bay, and the Kill Van Kull are considered fisheries; however, a NJDEP advisory is in effect for the Newark Bay Complex, which comprises Newark Bay, the Passaic River, and the Kill Van Kull. The advisory prohibits the sale or consumption of striped bass and

932520308

Talon Adhesives

01131-A DIRECT #2
01/12/72

ORIGINAL DIVISION / PRODUCT / CUSTOMER SALES REPORT

- IN THOUSANDS OF POUNDS AND DOLLARS -

Q	S.A.	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES GOAL FOR CURR. YEAR	SALES CURR. YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST ID / MARKED GP.
		XS-363															02227A		8970-363-17
1170		US PLYWOOD CHAM PA HAMILTON OH				3.09						3.08							00215518
		TOTAL PRODUCT * * * * *				3.08						3.08							8970-363-17
		XS-370															02229A		8970-370-17
1170		US PLYWOOD CHAM PA HAMILTON OH				.900						.900							00216518
		TOTAL PRODUCT * * * * *				.900						.900							8970-370-17
		XS-372															02222A		8970-372-17
1170		CHAMPION PAPERS HAMILTON OH				45.2							14.4	30.8					10015308
1170		US PLYWOOD CHAM PA HAMILTON OH				5.90					1.00	4.90							00216518
		PARENT CUST. TOT- U S PLYWOOD-CH				51.1					1.0	4.9	14.4	30.8					00047333
		TOTAL PRODUCT * * * * *				51.1					1.0	4.9	14.4	30.8					8970-372-17
		BS TOT CLASS HB40 & BLENDS LB	10120	6185	5170	3059	354	323	514	472	406	447	251	348	219	213	194	117	
		HCS 1207															0232A		8972-207-17
1170		US PLYWOOD CHAM PA HAMILTON OH				5.43										5.43			00216518
		TOTAL PRODUCT * * * * *				5.43										5.43			8972-207-17
		HCS 1208															0233A		8972-208-17
1170		US PLYWOOD CHAM PA HAMILTON OH				3.62										1.62	2.00		00216518
		TOTAL PRODUCT * * * * *				3.62										1.62	2.00		8972-208-17
		MONTAR 5															0032A		6405-005-17
5114		BORDEN MIDDLESEX NJ				137		24.2		29.2	23.0		29.4				31.4		10010802
5114		BORDEN NEW YORK NY		27.9															00111953
		PARENT CUST. TOT-BORDEN COLUMBUS		27.9		137		24.2		29.2	23.0		29.4				31.4		10010586
5114		NATL STARCH BLOOMFIELD NJ	125	159	125	161				41.5				40.0		40.0		39.3	10063221
5114		TACUM ADHESIVES KEARNY NJ		.500															10077885
		TOTAL PRODUCT * * * * *	125	167	125	298		24.2		70.7	23.0		29.4	40.0		40.0	31.4	39.3	6405-005-17

932520311

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Bergen Metal

932520313

PRELIMINARY ASSESSMENT

AND

SITE INVESTIGATION

BERGEN METAL COMPANY

KEARNY, HUDSON COUNTY

EPA ID NO.: NJ0000201004



New Jersey Department of Environmental Protection
Division of Publicly Funded Site Remediation
Office of Site Assessment

932520314

PART VII: SOIL EXPOSURE

Describe soil type. Include soil series, makeup of the soil and permeability of the soil.

The native soils beneath the site consist of medium to coarse sands derived from gravel deposits and more recent sands, silts, clays and organic debris left as remnants of Glacial Lake Hackensack. The native soils have since been covered by a layer a fill and classified as Urban Land. Urban Land consists of areas that have been developed for residential, commercial or industrial use. During development these areas were leveled or cut and filled to such an extent that 40 to 80 percent of the original soil has been altered. (Attachment C)

Briefly discuss contaminants identified in the soil. Include sampling date, sampling agency or company, sample locations, depth and contaminant level. Determine if the sample was collected on a residential property, school, daycare center, workplace, terrestrial sensitive environment or resource. State whether Level 1 or Level 2 contamination is present.

On May 24, 1994 the NJDEP, OSA collected three soil samples from the site. The metals, pesticide\PCB and semi-volatile fractions were collected at 0 to 4 feet. The volatile fraction for S1 and S3 were collected at 5 to 8 feet. A volatile fraction could not be collected at S2 because of coring device refusal.

Benzo(b)fluoranthene, benzo(a)pyrene, Aroclor-1248 and zinc were detected above the New Jersey Soil Cleanup Criteria.

Total area of surficial contamination (square feet): 60,000

If no soil sampling has been conducted, discuss areas of potentially contaminated soil, areas that are visually contaminated or results from soil gas surveys.

N/A

Determine if any commercial agriculture, silviculture, livestock production or grazing are present on or within 200 feet of the site.

There is no commercial agriculture, silviculture, livestock production or grazing present with 200 feet of the site.

Number of people that occupy residences or attend school or day care on or within 200 feet of the site: 0

Number of workers on or within 200 feet of the site: 1

Does a subsurface gas threat exist? (Y/N): N
If so, discuss the threat (include if in homes or occupied building).

PART VIII: DIRECT CONTACT

Describe accessibility of the site (fencing, site security, evidence of unauthorized entry).

The Bergen Metal Company is completely fenced to prevent access by the public.

Number of on-site employees: 1

PART IX: FIRE AND EXPLOSION

Discuss all incidents on site which have involved a fire or explosion. Indicate the date of the incident and the materials involved.

There have been no reports of fire at the facility.

Discuss site conditions which indicate a potential exists for fire or explosion (reactivity, incompatibility, ignitability, storage practices, container condition).

There is no increase in potential for a fire at the facility as a result of the nature of operations.

PART X: ADDITIONAL CONSIDERATIONS

Discuss evidence of wildlife or vegetation that has been or could be potentially impacted by on-site operations. Include areas exhibiting stressed vegetation or damage to wildlife.

There is no evidence of the vegetation being impacted by on-site operations.

Determine if a contaminant on site displays bioaccumulative properties. Name all bioaccumulative substances that may impact the food chain.

~~Benzo(b)fluoranthene and Aroclor-1248 were detected in on-site soils and display bioaccumulative properties.~~

g. Contaminants detected:

CONTAMINANT	S1	S2	S3	NJ SOIL CLEANUP CRITERIA
benzo(b)fluoranthene		5.9		4.0
benzo(a)pyrene	1.9	2.4		0.66
Aroclor-1254			2.6	2.0
zinc		1,730	5,270	1,500

Note: all values are in ppm

a blank indicates the contaminant was not detected

h. QA/QC: The NJDEP, Bureau of Environmental Measurements and Quality Assurance performed data validation on the project. All data were acceptable.

i. File location: Attachment L
NJDEP, Office of Site Assessment
300 Horizon Center
Robbinsville, New Jersey

2. a. Sampling date: November 29, 1994

b. Sampled by: NJDEP, Office of Site Assessment

c. Samples: Four sediment samples

d. Laboratory: ICM
1152 Rt 10
Randolph, New Jersey
Certification No. 14116

e. Parameters: TAL Metals

f. Sample description: SA1 and SA2 were collected upstream of the site. SA3 was collected at the probable point of entry of runoff from the site. SA4 was collected downstream of the site near a culvert. All samples were collected at 0 to 6 inches.

Frey Industries – PPG

SAMPLING/CLOSURE PLAN

**FREY INDUSTRIES, INC.
29 RIVERSIDE AVENUE
NEWARK, N.J.**

MAY 1990

**PREPARED BY:
ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES
200 MALTESE DRIVE
TOTOWA, NEW JERSEY**

932520320

8) Above Ground Storage Tanks (AGSTs) - Two abandoned AGSTs are located within a concrete dike wall. Three soil samples were obtained by IT and analyzed for PHC and PCBs. Only PHC was detected above the recommended action levels.

9) Concrete Underground Storage Tank (UST) Below Building 7 - A large concrete tank is located below Building 7; although currently not used, the tank is thought to have collected floor wash water. The integrity of the tank is not known. *Pat A ?*
No details on what is in tank - sample

10) Area between Building 12 and 3 - Two soil samples were obtained by IT and analyzed for PP+40 and PHC. Zn, Pb and PHC were above the action level in both samples; additionally, cyanide, selenium, chromium and PCBs were slightly above the recommended action levels in one sample (A-2).

DECONTAMINATION/DECOMMISSIONING

For each of the above-referenced areas of potential environmental concern the following actions will be performed to decontaminate and decommissioning Frey Industries' operation. All cleanup activities will be performed in accordance with all applicable local, state and federal regulations. All proposed sampling will follow the guidelines set forth by the

**ATTACHMENT 4:
PREVIOUS ANALYTICAL DATA**

932520322

RESULTS OF SAMPLING AND ANALYSIS

FREY INDUSTRIES, INC.
RIVERSIDE INDUSTRIAL PARK
NEWARK, NEW JERSEY

AUGUST, 1986

932520323

2.0 RESULTS OF SAMPLING AND ANALYSIS

Laboratory analytical results for samples collected at the Riverside facility are provided in Attachment I, including the results of field and travel blanks. Summaries of these analytical results are provided in Tables 1 through 12 correlating to the 11 areas of environmental concern and the background area described in the Sampling and Analysis Plan. The areas of environmental concern and corresponding sampling points are indicated on Figure 1, Sampling Location Map.

2.1 Area A - Staged Fill Material

Samples were collected at two locations for this area and analyzed for priority pollutants. Results indicated notable levels of both organic and inorganic compounds. Sample A1 contained 280 ppm of lead and 1400 ppm of petroleum hydrocarbons. Cleanup levels used by BISE are 100 ppm for both these compounds. Chlordane and base neutral organics were also detected at 0.99 ppm and 2.7 ppm, respectively.

In sample A2, cyanide was found at 13 ppm, slightly above the ECRA action level of 12 ppm. Exceeding the cleanup level of 100 ppm, chromium, lead, and petroleum hydrocarbons were observed at 200 ppm, 4100 ppm, and 770 ppm, respectively. Copper was present at 390 ppm and selenium at 5.9 ppm, also in excess of their respective 170 ppm and 4 ppm limits.

~~Arochlor 1260 was detected at 25.4 ppm.~~ Base neutral compounds mainly consisting of polynuclear aromatics were found at a total concentration of 27.8 ppm.

2.2 Area B - Pigment-Stained Area

One surface soil sample was collected in this area for analysis of priority pollutant metals and volatile organics. Results indicated levels below ECRA action levels for all elements and compounds analyzed. Therefore, this area appears relatively free of surficial contamination.

2.3 Area C - Northeast Corner of Building 6

Two soil borings were performed at the entry points to Building 6, and samples were collected for analysis of priority pollutants. Both samples contained levels of lead significantly exceeding the 100 ppm ECRA action level. In samples C1 and C2 respectively, concentrations of 910 ppm and 390 ppm were detected. Observed concentrations of all other priority pollutant organics and inorganics were within established ECRA limits.

2.4 Area D - Railroad Spur

Soil samples were collected from two points in the railroad spur area and analyzed for priority pollutants plus petroleum hydrocarbons. Both samples exhibited significant concentrations of lead and petroleum hydrocarbons. Samples D1 and D2 respectively contained 680 ppm and 160 ppm of lead and 11,000 ppm and 1,500 ppm of petroleum hydrocarbons. For both these contaminants, BISE imposes a 100 ppm cleanup value. Analytical results indicate relatively low concentrations for the remaining inorganic parameters.

Of the organic compounds analyzed, only Bis(2-ethylhexyl)Phthalate was detected. This base neutral compound was found at a concentration of 2 ppm.

2.5 Area F - Loading Dock - Southwest Corner of Building 12

Samples were obtained at one location in this area and received priority pollutants plus petroleum hydrocarbons analysis. Lead and petroleum hydrocarbons were detected at 1,400 ppm and 890 ppm in the surface increment. These concentrations exceed the 100 ppm cleanup level used by BISE. Also, slightly above its ECRA limit of 3 ppm, cadmium was found at 4.2 ppm.

Low levels of PCB and base neutral organic compounds were detected in this sample. ~~Arochlor 1254 was observed at a concentration of 4.8 ppm. Acceptable PCB levels determined by BISE range from 1 ppm to 5 ppm.~~ The total base neutral concentration of 13 ppm consisted mainly of polynuclear aromatics and Bis(2-ethylhexyl)Phthalate.

2.6 Area G - Drum Storage Area - Building 12

Samples were collected at three locations in this area and analyzed for priority pollutants. Only lead was found at levels exceeding established BISE limits. For samples G1, G2, and G3, lead concentrations were determined to be 610 ppm, 730 ppm, and 880 ppm, respectively.

Organic compounds were also detected in samples G1 and G2. Pesticides and base neutral organics were found in sample G1 totalling concentrations of 0.54 ppm and 31 ppm. In sample G2, base neutral compounds were identified at a total concentration of 5 ppm.

2.7 Area H - Drum Storage Area - Building 7, Southwest Corner

One soil boring was performed in this area and samples were obtained for priority pollutants analysis. Analytical results indicated concentrations of

cadmium and lead exceeding cleanup levels used by BISE. Cadmium was slightly above the limit of 3 ppm, exhibiting a concentration of 5.8 ppm. Lead was observed at 1000 ppm, a level ten times the established limit. All other inorganic compounds were within the acceptable ranges.

Bis(2-ethylhexyl)Phthalate was the only organic compound identified. It was detected at a concentration of 1.1 ppm.

2.8 Area I - Drum Storage Area - Building 7, East Side and Adjacent Retaining Wall

Samples were collected at four locations in this area and analyzed for priority pollutants. Concentrations of lead at all four sample points exceeded the established ECRA limit. Levels of 3100 ppm, 240 ppm, 580 ppm and 380 ppm were detected in samples I1, I2, I3, and I4, respectively. Sample I1 also contained cadmium, chromium, copper, and mercury at concentrations slightly above cleanup levels used by BISE.

A variety of base neutral organic compounds were exhibited in samples I1 and I4. Concentrations totalled 72 ppm in sample I1 and 6.8 ppm in sample I4.

2.9 Area J - Drum Storage Area - Railroad Spur

Samples were obtained at three sampling points in this area and analyzed for priority pollutants. Analytical results indicated levels of lead exceeding ECRA limits at all three sampling locations. For samples J1, J2, and J3, concentrations of 310 ppm, 380 ppm, and 660 ppm were detected, respectively. All other inorganic parameters were within acceptable levels set by BISE.

A variety of base neutral organic compounds were found in sample J1 at a total concentration of 54 ppm. Tetrachloroethylene, a volatile organic, was detected in the subsurface increment of sample J3 at a concentration of 0.34 ppm. This level is below the maximum concentration of 1 ppm established by BISE.

2.10 Area K - Abandoned Fuel Oil Tanks

Samples were collected at three locations in this area and analyzed for petroleum hydrocarbons and PCBs. Sample K-1 is the surface soil increment obtained at a point between the tanks. No aqueous material was encountered inside the tanks. Therefore, samples K-2 and K-3, collected from Tanks A and B, respectively, represent the dry material found in the tanks.

~~PCB concentrations were below laboratory detection limits for all three samples.~~ Petroleum hydrocarbon concentrations, however, exceeded 100 ppm in each of the samples. A level of 160 ppm was found in soil sample K-1.

TABLE 9
DATA SUMMARY OF SAMPLE RESULTS
AREA J

<u>Parameter</u>	<u>Concentration (ppm - dry weight)</u>					
	<u>J-1</u>		<u>J-2</u>		<u>J-3</u>	
	<u>0-6"</u>	<u>18-24"</u>	<u>0-6"</u>	<u>18-24"</u>	<u>0-6"</u>	<u>18-24"</u>
<u>Inorganics</u>						
Cyanide	*	-	*	-	1.3	-
Phenols	1.5	-	0.16	-	0.25	-
Antimony	*	-	*	-	*	-
Arsenic	3.6	-	1.7	-	5.5	-
Beryllium	0.24	-	0.39	-	0.29	-
Cadmium	0.85	-	0.77	-	2.1	-
Chromium	13	-	13	-	19	-
Copper	55	-	46	-	86	-
Lead	310	-	380	-	660	-
Mercury	0.35	-	0.12	-	0.34	-
Nickel	15	-	14	-	13	-
Selenium	*	-	*	-	*	-
Silver	0.25	-	0.11	-	0.29	-
Thallium	*	-	*	-	*	-
Zinc	240	-	190	-	500	-
<u>Organics</u>						
Total Pesticides	*	-	*	-	*	-
Total PCB's	*	-	*	-	*	-
Total Base/Neutrals	54	-	*	-	*	-
Total Acid Extractables	*	-	*	-	*	-
Total Volatiles	-	*	-	*	-	*

* Denotes concentration below laboratory detection limit. See analysis data sheets for specific detection limits.

- not analyzed

TABLE 10

DATA SUMMARY OF SAMPLE RESULTS
AREA K

<u>Parameter</u>	<u>Concentration</u> (ppm-dry weight)		
	<u>K-1</u> 0-6"	<u>K-2</u> Tank A	<u>K-3</u> Tank B

Inorganics

Petroleum Hydrocarbons	160	1600	300
------------------------	-----	------	-----

Organics

PCBs

*Denotes concentration below laboratory detection limit. See analysis data sheets for specific detection limits.

TABLE 11
DATA SUMMARY OF SAMPLE RESULTS
AREA L

Parameter	Concentration (ppm - dry weight)			
	<u>L-1</u>		<u>L-2</u>	
	<u>0-6"</u>	<u>18-24"</u>	<u>0-6"</u>	<u>18-24"</u>
<u>Inorganics</u>				
Cyanide	*	-	1.6	-
Phenols	0.32	-	0.59	-
Antimony	*	-	*	-
Arsenic	12	-	14	-
Beryllium	0.36	-	0.17	-
Cadmium	1.4	-	0.69	-
Chromium	31	-	23	-
Copper	160	-	74	-
Lead	450	-	480	-
Mercury	0.15	-	0.16	-
Nickel	24	-	34	-
Selenium	*	-	0.76	-
Silver	0.26	-	0.27	-
Thallium	*	-	*	-
Zinc	300	-	180	-
<u>Organics</u>				
Total Pesticides	*	-	*	-
Total PCB's	*	-	*	-
Total Base/Neutrals	*	-	*	-
Total Acid Extractables	*	-	*	-
Total Volatiles	-	0.028	-	4.3

*Denotes concentration below laboratory detection limit. See analysis data sheets for specific detection limits.

- not analyzed

TABLE 12
DATA SUMMARY OF SAMPLE RESULTS
AREA M

<u>Parameter</u>	<u>Concentration (ppm - dry weight)</u>		
	<u>0-6"</u>	<u>M-1</u>	<u>18-24"</u>
<u>Inorganics</u>			
Cyanide	*	-	-
Phenols	0.69	-	-
Antimony	*	-	-
Arsenic	9.4	-	-
Beryllium	0.41	-	-
Cadmium	1.4	-	-
Chromium	29	-	-
Copper	73	-	-
Lead	410	-	-
Mercury	0.74	-	-
Nickel	18	-	-
Selenium	*	-	-
Silver	0.25	-	-
Thallium	*	-	-
Zinc	350	-	-
Petroleum Hydrocarbons	81	-	-

Organics

Total Pesticides	*	-
Total PCB's	*	-
Total Base/Neutrals	*	-
Total Acid Extractables	*	-
Total Volatiles	-	*

* Denotes concentration below laboratory detection limit. See analysis data sheets for specific detection limits.

- Not analyzed

3.0 CONCLUSIONS

Petroleum hydrocarbons were detected at considerable concentrations in Areas A, D, and F. Levels ranged from 81 ppm in the background sample (M1) to 11,000 ppm in sample D1.

Samples A2 and I2 exhibited the highest levels of compounds overall. Both samples exceeded ECRA cleanup values for cadmium, chromium, copper, and lead. Base neutral organic compounds totalled 27.8 ppm and 72 ppm in samples A2 and I2, respectively. Sample A2 also contained PCB's at a concentration of 25.4 ppm.

The only contaminants found consistently throughout the sampling locations were lead and base neutral organics. Lead levels ranged from 86 ppm to 4,100 ppm with the average concentration at 828 ppm. Base neutral organic totals ranged from non-detectable to 72 ppm.

Since relatively high lead levels were observed in almost every sample analyzed, including the background sample (M1), they may reflect regional values. Lead and base neutral organic concentrations may be attributed to leaded gas, partially combusted hydrocarbons, asphalt, and vehicle exhaust. Such sources are indicative of the industrial nature of the site and its surroundings.

It is also possible that in view of its proximity to the Passaic River, this site may have originally been marshland. The analytical results of surface samples, therefore, may characterize fill, transported to the site prior to its construction.

Industrial Development Associates
141 Lanza Avenue
Garfield, NJ 07026
To Attn. of: Mr. Anthony Pugliese
N. J. Lab Certification ID #12064

Job #: 8640
Date: 8/15/86
Auth:
Lot #: 0991
Invoice #:
Sample Date: 7/10/86

Pesticides and PCB Compounds
(by GC)

#58416
Riverside Industrial Park
A-2, 0-6
(ppm)

ALDRIN	ND
BHC-alpha	ND
BHC-beta	ND
BHC-gamma (LINDANE)	ND
BHC-delta	ND
CHLORDANE	ND
4,4'-DDD	ND
4,4'-DDE	ND
4,4'-DDT	ND
DIELDRIN	ND
ENDOSULFAN I	ND
ENDOSULFAN II	ND
ENDOSULFAN SULFATE	ND
ENDRIN	ND
ENDRIN ALDEHYDE	ND
HEPTACHLOR	ND
HEPTACHLOR EPOXIDE	ND
TOXAPHENE	ND
PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND
PCB-1260	25.4

ND - NONDETECTABLE LESS THAN 0.50 ppm FOR PESTICIDES AND LESS THAN
1 ppm FOR PCB's AND TOXAPHENE.



Industrial Development Associates
141 Lanza Avenue
Garfield, NJ 07026
To Attn. of Mr. Anthony Pugliese
N.J. Lab Certification ID# 12064

Job #: 8640
Date: 8/15/86
Auth: .
Lot #: 1002
Invoice #:
Sample Date: 7/11/86

Pesticide & PCB Compounds
(by GC)

Sample #58474
Riverside Industrial Park
F-1, 0-6"
(ppm)

ALDRIN	ND
BHC-alpha	ND
BHC-beta	ND
BHC-gamma (LINDANE)	ND
BHC-delta	ND
CHLORDANE	ND
4,4'-DDD	ND
4,4'-DDE	ND
4,4'-DDT	ND
DIELDRIN	ND
ENDOSULFAN I	ND
ENDOSULFAN II	ND
ENDOSULFAN SULFATE	ND
ENDRIN	ND
ENDRIN ALDEHYDE	ND
HEPTACHLOR	ND
HEPTACHLOR EPOXIDE	ND
TOXAPHENE	ND
PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	4.8
PCB-1260	ND

ND - NONDETECTABLE LESS THAN 0.50 ppm FOR PESTICIDES AND LESS THAN
1.0 ppm FOR PCB's AND TOXAPHENE.

Regional Office

165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08818-7809 • (201) 225-2000

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932520333

PPG – Frey industries

ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

PAGE 323

- IN THOUSANDS OF POUNDS AND DOLLARS -

NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES FOR CURR. YR.	SALES CURR. YR.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST. ID. / MAY 69-71
PARENT CUST. TOT-MOBIL OIL CORP	65.0	64.6	65.0	54.0	13.0		5.0	5.0	3.0	5.0		2.0	6.0	3.5	11.5		10254443
AROCOR DIST. 5460-HI SOL															003	5A	1040-400-11
5021 BUREAU HANCO ALABASTER A'				1.00									1.00				00254059
5024 STO T CHEK INC STAT ISL NY	200	100	200	133		19.0	24.0		26.0		10.0	20.0		20.0	14.0		10075350
5026 JENNY LORE REMARK NJ		4.50															10055190
5027 JENNY LORE REMARK NJ				.700									.700				00254512
5028 NASHUA-LUTCH BRAND CHICAGO IL	20.0	4.50	20.0	8.40						.60		2.80			1.00	4.00	00152900
5030 NASHUA CORPORATION NASHUA NH		.610															10056555
PARENT CUST. TOT-NASHUA CORPORAT	20.0	5.21	20.0	8.40						.60		2.80			1.00	4.00	10056555
5024 NATL BRONZE PHOR FRANKLIN PK I				.400										.400			00162276
5027 NATIONAL CHEM CO PL BALTIMORE MD	.300	.300	.300	.300	.100			.100			.100						00218978
5028 NATL EXPANSION JOINT OAKLAND CA				3.40									1.60			1.80	00263507
5029 N L INDUSTRIES SAN FRANCISCO CA		2.00															10056522
5030 NATIONAL SPRAY CAN ELIZABETH NJ		2.50															00151261
5031 NATL STARCH BOUND BROOK NJ	900	615	900	304	40	120	80					40		24			00088516
5032 NATL STARCH FINGERME NJ				160											32	128	00264751
5033 NATL STARCH PLAINFIELD NJ	200	98.0	200	56.0											56.0		10055759
PARENT CUST. TOT-NATL STARCH - C	1100	703	1100	520	40	120	80					40		24	88	128	00044914
5034 NEW YORK BRONZE ELIZABETH NJ		1.75		1.50										1.50			00216735
5035 NORTH AMER PKG CORP ADDISON I		.100															00225673
5036 NORTH AMER PAINT VANHARASSA NJ				1.10							.050	.800				.250	00242276
5037 NORTH ELECTRIC GALLON OH	2.00	2.20	2.00	2.10		.50			.60						1.00		10059155
5038 JENNS CORNING GRANVILLE OHIO		.100															00088609
5039 PARK NAME PLATE FLUSHING LI NY				.050									.050				00170078
5040 PIERCE - STEVENS BIRVERTON PA	143	147	143	100	30.0				30.0	30.0	30.0	30.0		30.0			10062926
5041 POLYREL CORP BALTIMORE MD		.400															10063557
5042 POLYMERIC SYSTEMS PITTSBORO PA				2.00											2.00		00270679
5043 POLYPLASTEX UNITED CHICO CA				.100									.100				00264369
5044 POLYPLASTEX UNITED PINELLAS FL	3.00	2.85	3.00	7.00	1.00					2.00		2.00				2.00	00134422
PARENT CUST. TOT-POLY PLASTEX UN	3.00	2.85	3.00	7.10	1.00					2.00		2.00	.10			2.00	00134307
5045 POLYTECH CO ROCKAWAY NJ				3.00			1.00	1.00	1.00								00250759
5046 NATL STARCH GLOOMFIELD NJ		.200		4.60	1.0	27.0	25.0			1.0				.6			10063221
5047 PRG REMARK NJ	1.00	1.00	1.00														10063434
5048 TFC SPRINGDALE PARK	10.0																10055353
PARENT CUST. TOT-PITTS PLATE CL	11.0	1.20	1.00	4.60	1.0	27.0	25.0			1.0				.6			10063345
5049 PROTEX INDUSTRIES DENVER CO				1.00				1.00									00255742

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Wilbur B. Driver Company

932520338

01131-A DIRECT #2
01/12/72ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

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- IN THOUSANDS OF DOLLARS AND COLLAGES -

NO.	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES QUOTE FOR CURR. YEAR	SALES CURR. YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUSTOMER / MAILING GP.
1131	SANTOVAC 2																01825A	6776-C02-1
1132	JULIENEL CORP DELTA PA				.120					.120								00256852
1133	JECH AIRCRAFT BOULDER CO				.060								.060					00252145
1134	JESEAST INC WILCOUGHBY OH				.120	.120												00243220
1135	JEWELLER FINEISH SUGAR GROVE IL				.120									.120				00265857
1136	JEWELLER CO HOLYOKE MASS		2.40															10011817
1137	JEWELLER SHELTERITY KOKOMO IN				2.40		2.40											10081781
1138	JUCLA LOS ANGELES CA				.420								.060		.240		.120	00263435
1139	UNIV OF CALIF LOS ALAMOS NM				.060					.060								10013186
1140	PARENT COST. TOT-UNIV OF CALIF B				.480					.060			.060		.240		.120	00047260
1141	JULIENEL CORP DELTA PA				.300													00272200
1142	CARPENTER TECHNOLOGY READING PA				18.0	2.40	2.40		2.40	3.60		3.60	3.60					00231207
1143	CALIFORNIA TRACTOR MISSOURI IL				.120													00112202
1144	CERTIFIED ALLOY LONG BEACH CA				1.80			1.20							.60			00223069
1145	CEN-RAY FINISHING BROOKLYN NY				.060		.060											00245297
1146	CEN-RAY TACKLE HUT SPRINGS AR				.060			.060										00251127
1147	CEN-RAY ENTERPRISE CHARLESTON S C				.060			.060		.060								10023484
1148	CUSTOM MOULDED LEONISTER PA				.060					.060								00255246
1149	DEBOR NOVELTIES LITHUANIA				.300									.300				00264326
1150	DELTECH SYSTEMS MIAMI FL				.600										.600			00269533
1151	DELTECH SYSTEMS TAMPA FL				.600										.600			00269549
1152	DELTECH SYSTEMS TAMPA FL				1.30	1.30		.60			.60							10023559
1153	DELTECH SYSTEMS TAMPA FL	15.0	15.0															10023559
1154	DELTECH SYSTEMS TAMPA FL				.060													00271850
1155	DELTECH SYSTEMS TAMPA FL				.300					.180								10023559
1156	EDWARDS LAB SANTA ANA CALIF				2.40				1.20						1.20			00152076
1157	E. G. & S. INC LOS ALAMOS NM				.060		.060											00244533
1158	GENERAL TRADING CORP MIAMI FL				.060					.060								00256242
1159	GEN CORP HUNTER CITY PA				.180										.180			00260335
1160	GEN CORP HUNTER CITY PA				.060					.120								00185004
1161	GEN CORP HUNTER CITY PA				.060					.060								10030558
1162	GEN CORP HUNTER CITY PA				.360			1.20							1.20	1.20		10032792
1163	GEN CORP HUNTER CITY PA				1.92			.600		.720					.600			10030927
1164	GENERAL DYNAMICS SAN DIEGO CA				.060							.060						00260371
1165	GENERAL ELECTRIC WILLINGTON NC				.060													00274309
1166	GEN ELEC CONGRESSIONAL				.080				.060									00120022
1167	GEN ELEC CONGRESSIONAL				.240									.240				10031350
1168	PARENT COST. TOT-GEN ELEC SCHEME				.360				.060				.060		.240			
1169	GENERAL WILLIAMSKREE ILL		.600		.600								.600					10032474
1170	GEORGETOWN UNIVERSITY WASH DC				.060							.060						00252409
1171	GILMORE MFG PHILADELPHIA PA				.060											.060		00271721
1172	GILMORE MFG SOMERSET PA				.060													00271989

932520339

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Angelica Healthcare Group

Penalty (\$): 15,000 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-92-0102 Case Name: AZS CORPORATION, ET AL

Type: CERCLA ORDER FOR RESPONSE ACTION

File Date: 03/31/1992 Conclusion Date: 03/31/1992

Defendant: AZS CORPORATION, ET AL

Law(s): CERCLA 106

Facility: WHITE CHEMICAL CO

Address: NEWARK, NJ 07114

Penalty (\$): Superfund Cost Awarded (\$):

Result: Unilateral administrative order without adjudication

Administrative Action 02-92-0139 Case Name: BYRNE LABORATORIES, INC

Type: FIFRA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 06/30/1992 Conclusion Date: 10/01/1993

Defendant: BYRNE LABORATORIES, INC

Law(s): FIFRA 7C

Facility: BURLINGTON BIO-MEDICAL

Address: NEWARK, NJ 07114

Penalty (\$): 0 Superfund Cost Awarded (\$):

Result: Consent instrument with no penalty

Administrative Action 02-92-0162 Case Name: REICHHOLD CHEMICALS, INC

Type: RCRA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 06/29/1992 Conclusion Date: 10/05/1993

Defendant: REICHHOLD CHEMICALS, INC

Law(s): RCRA 3002

Violation(s): Container

LBLMRK

Facility: REICHHOLD CHEMICALS INC

Address: NEWARK, NJ 07105

Penalty (\$): 16,158 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-93-0013 Case Name: ANGELICA HEALTH CARE GROUP

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 10/27/1992 Conclusion Date: 03/30/1993

Defendant: ANGELICA HEALTH CARE GROUP

Law(s): TSCA 6E

Pollutant(s): PCBs

Facility: ANGELICA HEALTH CARE

Address: NEWARK, NJ 07114

Penalty (\$): 10,000 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-93-0026 Case Name: BENNETT HEAT TREATING & BRAZIN

932520342

City Electric

NEWARK, NJ 07114

Penalty (\$): 25,000 Superfund Cost Awarded (\$):

Judicial District: DNJ Docket Number: 90-2287(HLS)

Result: Consent instrument with penalty

Civil Court Case 02-88-0641 Case Name: DIAMOND ALKALI SUPERFUND SITE

File Date: 12/04/1989 Conclusion Date: 11/19/1990

First Defendant (in alphabetical order): CHEMICAL LAND HOLDINGS, INC.
(There were 1 others; use a HIGH detail search to list them.)

Law(s): CERCLA 107A CERCLA 106A

Facility: DIAMOND ALKALI

Address: 80 LISTER AVE

NEWARK, NJ 07105

Penalty (\$): Superfund Cost Awarded (\$): 1,834,766

Judicial District: DNJ Docket Number: 89-5064(JWB)

Result: Consent instrument with specified cost recovery

Administrative Action 02-88-0760 Case Name: ARCHDIOCESE OF NEWARK

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 03/21/1985 Conclusion Date: 01/29/1986

Defendant: ARCHDIOCESE OF NEWARK

Law(s): TSCA 6A

Violation(s): General facility requirements

Pollutant(s): ASBESTOS

Facility: ARCHDIOCESE OF NEWARK

Address: NEWARK, NJ 07102

Penalty (\$): 12,000 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-88-0773 Case Name: CITY ELECTRIC

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 11/10/1981 Conclusion Date: 04/26/1982

Defendant: CITY ELECTRIC

Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s): PCB

Facility: CITY ELECTRIC MOTOR CO

Address: NEWARK, NJ 07102

Penalty (\$): 900 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-88-0777 Case Name: CONOCO INC D/B/A PITT-CONSOL C

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 02/29/1984 Conclusion Date: 10/25/1984

Defendant: CONOCO INC D/B/A PITT-CONSOL C

Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s): PCB

Facility: DUPONT CHEMICALS - PITT CONSOL

Address: NEWARK NJ 07105

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31131-A DIRECT #2
01/12/72

ORGANIC DIVISION SPECIALTY PRODUCTS
PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

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- IN THOUSANDS OF POUNDS AND DOLLARS -

QTY	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR 1970	SALES LOCAL FOR CURR. YEAR	SALES CURR. YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUSTOMER / AMOUNT
	AROCOR OIST 5460-HI SOL																00385A	1040-430-1
5724	CONTINENTAL CAN VAN HERT OH	500	17.3	.500	26.4		6.75	6.75	6.75	6.75	6.75	8.35		5.85			5.40	0022787
5725	CONTINENTAL CAN CO READING PA	500	13.5	.500	72.0				9.0		9.0	9.0	9.0	9.0		9.0	18.0	1001173
	PARENT COST. TOT-CONTINENTAL CAN	1000	30.8	1000	98.4		6.8	6.8	2.3	6.8	2.3	17.4	9.0	14.9		9.0	23.4	00043167
5726	CONTINENTAL CHEM BAKERFIELD CA		.200															10018292
5728	COOK PAINT & VARN KANSAS C MO		.500		.500			.500										00115232
5722	COOK PAINT - VA N KAN CITY MO		.400		1.50			.50	1.00									10019494
	PARENT COST. TOT-COOK PAINT - VA		.900		2.00			1.00	1.00									10019494
5745	COSDEN CHEM COATING BEVERLY NJ		.500															10019958
5710	CORT INDUSTRIES PARAMUS NJ		.050															00210545
5702	DAVIS PAINT REG LYNCHBURG VA	.002	.120	.002	.750		.250				.500							00220214
5743	DELSEY SANITATION CARPEN NJ			.100	.100	.050			.050									00246505
5723	DEHNIS INC REG CHELSEA MA		.100															00227565
5713	DEHNIS INC FRANKLIN MA		2.00		.500										.500			10021782
5724	DEXTER CORP HAYWARD CA				.600							.600						00230347
5724	DEXTER CORP MAUREAN ILLINOIS		.650															00223535
5714	WHITE & CO INC MOUNTAIN PA		.200															00122637
5704	DUJOS CHEN HEN HAVEN CT		.100															10022656
5707	DOUGLEDAY DERRYVILLE VA		.050															10022754
5710	E I DU PONT EDISON NJ		.250		662			84	84	89	160	80	80		43	43		00157477
5712	EDILS NEWARK NJ		.200															00210587
5720	FRANK A DUMIS CO OAKLAND CO			.050									.050					00263513
5744	E I DU PONT WILMINGTON DE		.900		.750	.300							.400			.050		10023554
5745	E I DU PONT DE NEMO PARLIN NJ			.050	.050													10023605
5745	E I DU PONT DE NEMO PHILA PA			.050					.050									10023963
5745	E I DU PONT DE WASHINGTON LV	100	3.40	100														10024145
	PARENT COST. TOT-E I DU PONT DE	100	4.30	100	.850	.350			.050				.400			.050		10023564
5702	DOHA COMMODITIES HARRISON NY			.050											.050			00265167
5707	DYNASURF CHEM BALTIMORE MD			.150	.150													10024439
5704	EASTMAN KODAK CO ROCHESTER NY			.100									.050		.050			10025125
5701	JOHN EASTMAN KINGSPORT TENN		.300	.200						.200								10078547
5725	TEXAS EASTMAN CO LONGVIEW TX	500	158	500	116	24.0			24.0		10.0				10.0	24.0	24.0	10079292
	PARENT COST. TOT-EASTMAN KODAK C	500	158	500	116	24.0			24.0	.2	10.0		.1		10.1	24.0	24.0	10025125
5739	ELL IOT PT - VARN CHICAGO IL	50.0																10025982
5708	ENGINEERED YAKUS COVENTRY RI		1.73															10026313
5720	EMAR INC WICHITA KAN		.050															10026453
5724	ENTERPRIZE PAINT S PLAINFIELD NJ			.500									.500					00261173

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Weldotron

IN THOUSANDS OF DOLLARS AND DOLLARS-																				
Q	C	NAME OF PRODUCT/CUSTOMER	POTENTIAL	LAST YEAR SALES	SALES FOR CURR YEAR	SALES CURR YTD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	CUST ID / MAJOR GEO. GP	
		PYDRAUL 230															00533A		4597-230-1	
1128		STENAGU COMPANY DAVENPORT IA	4.70	3.15	4.70														00214965	
1178		STONEMIRE ALUM HAYESVILLE KY	80.0		80.0														00210552	
1132		TELEDYNE ALLVAC MONROE NC			2.63	1.50				1.05									00242047	
1135		STONEMIRE POPULATION DALLAS TX		2.25															00210567	
1136		US STEEL CHEMICAL DAYTON TX	50.0	49.6	50.0														00210049	
1137		MACINE CHICAGO ILLINOIS IL	2.00	2.00	2.00														00179565	
1230		WELDOTRON CORP NEWARK N J		4.50															00170232	
1230		WELDOTRON CORP PISCATAWAY NJ	4.50	2.40	4.50														00231576	
		PARENT CUST. TOT-WELDOTRON CORP	4.50	3.13	4.50														00170232	
1176		YOUNGER BROS THE CINCINNATI OH		2.00															00230618	
		TOTAL PRODUCT * * * * *	446	245	305	81.4	23.6	17.9	34.1	3.7		2.1							4597-230-1	
		PYDRAUL 230-A															01807A		4597-231-1	
1134		ANCHOR COUPLING CO LIBERTY IL			1.07								1.07						00199883	
1230		BETHLEHEM STEEL BETHLEHEM PA			6.11					2.04			2.04	2.04					10014583	
1134		CAVOTEC STEEL CHICAGO IL			4.50					2.55		2.55							10013194	
1132		CANNERS OF E ARK W MEMPHIS ARK			1.09												.509		00272493	
1234		CIBA PHARMACEUTIC SOMERSET NJ			1.41											1.41			00260075	
1132		CUSTOM DEV CAN CHARLOTTE NC			1.53								1.02					.51	00255408	
1131		UNIVERSAL CYCLOPS ST TITUSV PA			1.02													1.02	00228656	
1252		E I DUPONT SEAFORD DE			1.07										.047				00181013	
1176		FLORIDA STEEL INDIANAPOLIS FL			96.6				23.8			23.9			24.4			24.4	00227869	
1138		PRO MOTOR CINCINNATI OH			1.02													.509	00250050	
1132		A P GREEN REFACTORIES MEXICO MO			1.41							.141							00150711	
1135		THOMAS STEEL CO ST LOUIS MO			1.02														10009088	
1133		THE H W KELLOGG CO CHAMPAIGN IL			1.07										.047				00126802	
1134		KELSEY HAYES CO ROCKFORD IL			1.24					1.01	10.3		2.43	2.43	2.43	29.5		24.4	10013191	
1135		SEVEN UP CO DETROIT MI			1.07										1.07				00262498	
1138		STENAGU COMPANY DAVENPORT IA			3.00										1.02		2.04		00214965	
1134		STEVENSON SALES DAVENPORT IA			2.04						1.02				1.02				00254777	
1132		TELEDYNE ALLVAC MONROE NC			3.06							4.07	1.02	2.03					00242047	
1168		US STEEL CHEMICAL DAYTON TX			15.3												5.1	10.2	00210049	
		TOTAL PRODUCT * * * * *			261						27.9	22.0	30.0	29.1	25.6	27.6	29.7	7.1	61.6	4597-231-1
		TOT MAJOR PYDRAUL 230A	446	245	305	342	23.6	17.9	34.1	31.6	22.0	32.1	29.1	25.6	27.6	29.7	7.1	61.6		

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Landfill 15E

NEWARK DRIVE-IN
aka Edle Realty Landfill
By Foundry Street and Routes 1 & 9
Newark, Essex County, New Jersey

The Newark Drive-In (aka Edle Realty Landfill) lies off Foundry Street and Routes 1 & 9, west of New Jersey Turnpike interchange 15E. The area is an old landfill containing construction and demolition debris (incinerator ash) deposited prior to the 1950's. For approximately 30 years, the site was used as a drive in movie theater.

Recently earth work was performed at the site with the intent to construct a new movie theater. In August 1985 the NJDEP, acting on an anonymous tip, sampled for dioxin. No dioxin was detected. The New Jersey Turnpike Authority investigated the property for their proposed widening project. Consultants for the Authority sampled the site and detected Polynuclear Aromatic Hydrocarbon contamination up to 822 ppm.

There were reports of soil removal from the Newark Drive-In. However NJDEP enforcement inspector David Beeman believes that no such removal is occurring. On the contrary, there may be dumping on the property. In July 1986 the owners filed for a Landfill Disruption Permit with Solid Waste Engineering. The intent is to level the site, existing debris will be used as fill, not removed from the property. Due to the reports of contamination, the site is assigned a high priority for inspection.

Submitted by:

David Van Eck
HSMS IV

Hrs. worked: 28

NEWARK DRIVE-IN

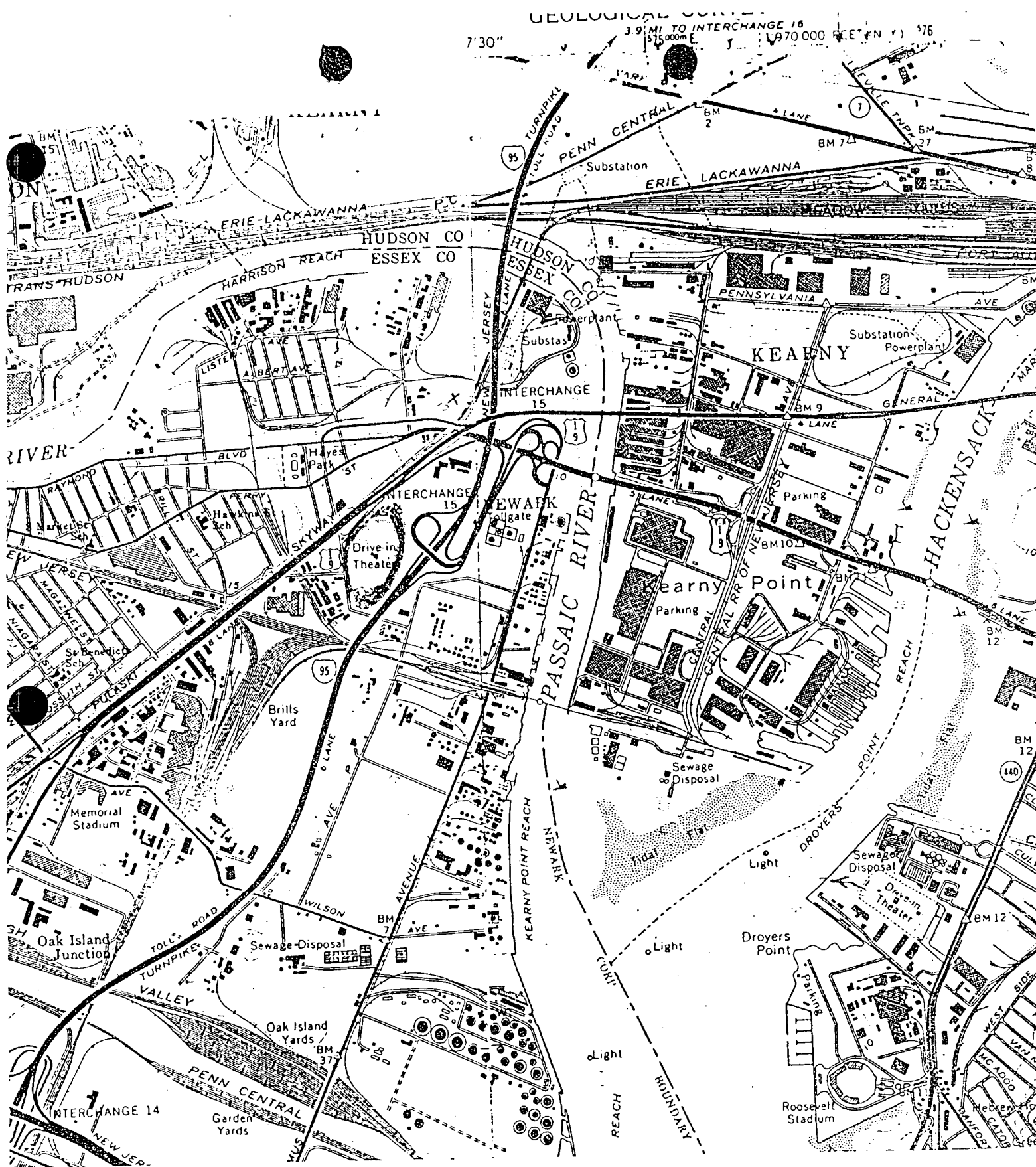
aka Edle Realty Landfill

By Foundry Street and Routes 1 & 9

Newark/Essex County, New Jersey

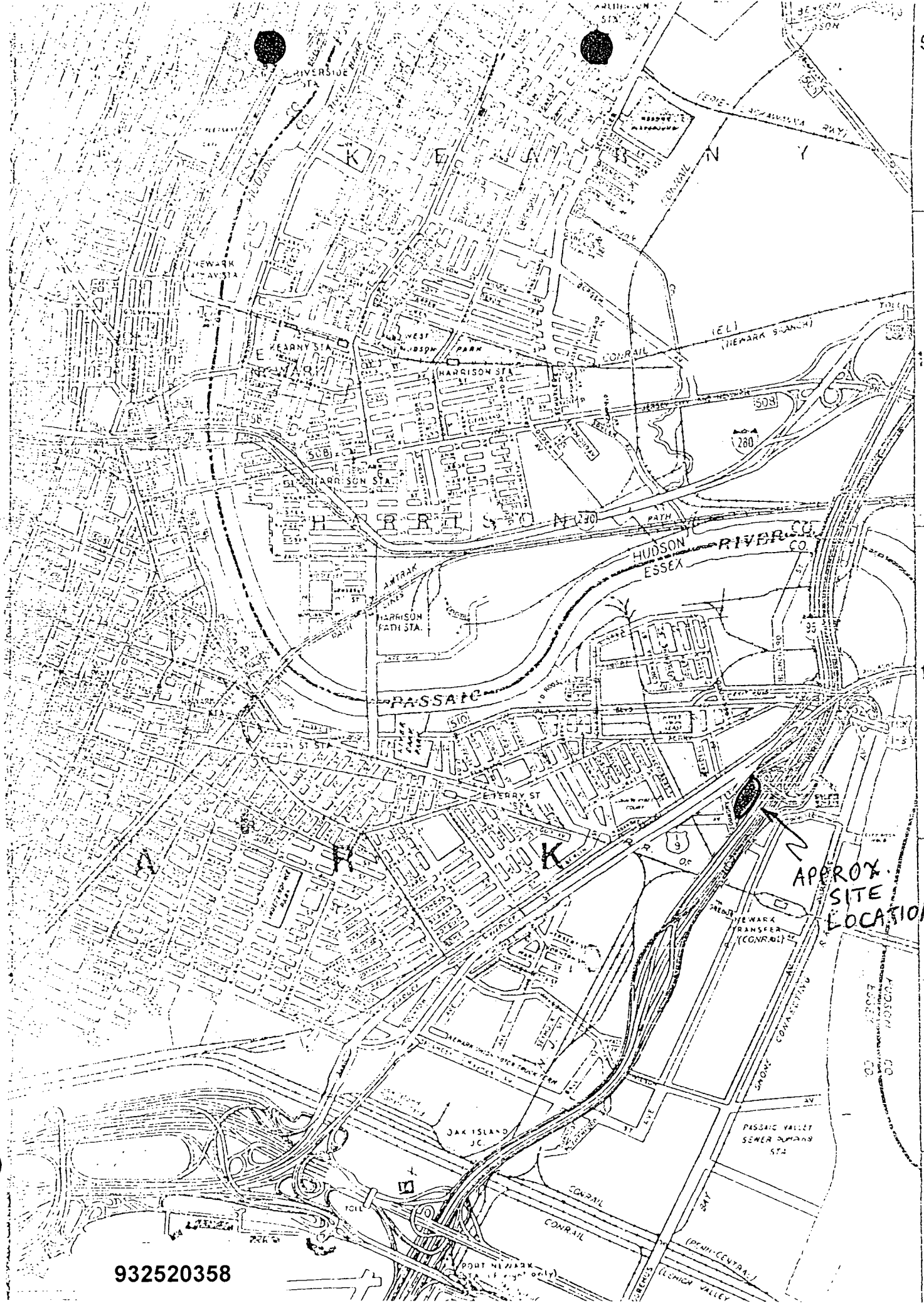
INDEX OF ATTACHMENTS

Attachment A	Site Information
Attachment B	Landfill Disruption Permit Application
Attachment C	Referral



Newark Drive-In
 By Foundry St, Rts 1 & 9, NJ Tpk.
 Newark, Essex Co.

Lat. $40^{\circ} 43' 50''$
 Long. $74^{\circ} 07' 51''$
 932520357



932520358

Ass. 9th 0000002

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INCIDENT NOTIFICATION REPORT

HENTON DISPATCH ☒ DIV. OF WASTE MANAGEMENT ☐ DIV. OF ENVIR. QUALITY ☐ DIV. OF WATER RESOURCES

FIELD OFFICE: ☐ NORTHERN ☐ METRO ☒ CENTRAL ☐ SOUTHERN

DATE: 08-01-85 TIME (Military): 1544 REC'D BY: E2206 PHONE NO.: 609-426-0700

IDENT REPORTED BY: CASE NO. 85-08-01-9C

NAME: ANON - PHONE:

STREET:

CITY: STATE:

AFFILIATION: A CIVIL ENGINEER AT SRS (CONFIDENTIAL PLEASE)

TYPE OF INCIDENT:

EMERGENCY: ☐ FIRE ☐ EXPLOSION ☐ DRUMS ☐ RILL ☐ DERAILMENT ☐ MVA
COMPLAINT: ☐ SMOKE ☐ ODORS ☐ DUST ☐ SEWAGE ☐ NUISANCE ☒ ILLEGAL DUMPING
OTHER: ☒ G WATER CONTAMINATION

IDENT LOCATION:

NAME (Site): OLD DRIVE IN SITE ☐ UNK PHONE: NONE

STREET: OFF FERRY ST. IN TOWNBOUND SECTION

CITY: NEWARK COUNTY: ESSEX STATE: NJ ZIP CODE:

SUBS AT SCENE OF INCIDENT: Groundwater contamination per Pot. H₂O Div.

DATE OF INCIDENT: 8-1-85 TIME: 1544

ANYONE HOSPITALIZED ☐ YES ☒ NO POLICE AT SCENE ☐ YES ☒ NO
AREA EVACUATED ☐ YES ☒ NO FIREFIGHTER AT SCENE ☐ YES ☒ NO
CONTAMINATION OF ☐ AIR ☒ LAND ☒ WATER ASSISTANCE REQUIRED ☒ YES ☐ NO
PUBLIC EXPOSURE ☐ YES ☒ NO
RECEIVING WATER: POTABLE WATER SOURCE ☐ YES ☒ NO
WIND DIRECTION: LOCATION TYPE ☐ CITY ☒ INDUSTRIAL ☐ RURAL

TYPE OF INCIDENT/PROBLEM: ☐ KNOWN ☒ UNKNOWN

Property owner: COMPANY NAME: Summer Redstar PHONE:

CONTACT: Scott Sweeney TITLE: Construction Foreman

STREET:

CITY: Boston COUNTY: 1 STATE: MASS ZIP CODE:

IDENTITY OF SPILLED AND/OR DISCHARGED SUBSTANCE: ☐ KNOWN ☐ UNKNOWN

NAME OF SUBSTANCE: Pot. H₂O PCB Trichloropheno / x Dioxin

AMT.: UNK A/P/E: SUBSTANCE CONTAINED ☐ YES ☐ NO ☐ UNKNOWN

AGENTS NOTIFIED: (A 310)

HEALTH DEPT.: PERSON: 932520359 PHONE: DATE:

Attachment

(41)

Assgn

IC 006

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INCIDENT NOTIFICATION REPORT

TELEPHONE DISPATCH



DIV. OF WASTE MANAGEMENT



DIV. OF ENVIR. QUALITY



DIV. OF NATURAL RESOURCES

TO

FIELD OFFICE:



NORTHERN



METRO



CENTRAL



SOUTHERN

DATE: 08-09-85

TIME

(Military) 1544

REC'D

BY E2206

PHONE

NO. 609-426-0700

IDENT REPORTED BY:

CASE NO.

85-08-01-9C

NAME

ANON -

PHONE

STREET

CITY

STATE

AFFILIATION

A CIVIL ENGINEER ON SITE (CONFIDENTIAL PLEASE)

TYPE OF INCIDENT:

EMERGENCY:



FIRE



EXPLOSION



DRUMS



HILL



DERAILMENT



MVA

COMPLAINT:



SMOKE



ODORS



DUST



SEWAGE



NUISANCE



ILLEGAL DUMPING

OTHER:

G WATER CONTAMINATION

INCIDENT LOCATION:

NAME (Site)

OLD DRIVE IN SITE



UNK

NAME

STREET OFF FERRY ST. IN TROUBOUND SECTION

CITY NEWARK

COUNTY

ESSEX

STATE

NJ

ZIP CODE

CAUSE AT SCENE OF INCIDENT:

Groundwater contamination PCB's, possibly Dioxin

DATE OF INCIDENT:

8/11/85

TIME:

11:11

ANYONE HOSPITALIZED



YES



NO

AREA EVACUATED



YES



NO

CONTAMINATION OF



AIR



LAND



WATER

PUBLIC EXPOSURE



YES



NO

RECEIVING WATER

POTABLE WATER SOURCE



YES



NO

WIND DIRECTION

LOCATION TYPE



CITY

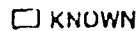


INDUSTRIAL



RURAL

PLACE OF INCIDENT/PROBLEM:



KNOWN



UNKNOWN

PROPERTY OWNER

COMPANY NAME Summer Redactor

PHONE

CONTACT

Scott Sweeney

TITLE

Construction Foreman

STREET

CITY

Boston

COUNTY

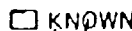
L

STATE

MASS

ZIP CODE

IDENTITY OF SPILLED AND/OR DISCHARGED SUBSTANCE:



KNOWN



UNKNOWN

NAME OF SUBSTANCE

Possibly PCB Trichlorophenol & Dioxin

AMT.

UNK

A/P/E

SUBSTANCE CONTAINED



YES



NO



UNKNOWN

AGENTS NOTIFIED: (A 310)

932520360

HEALTH DEPT.: PERSON

PHONE

DATE

Attachment

(A1)

**Results of Preliminary Investigations
and Sampling in Proposed New Jersey
Turnpike Right-of-Way at the
Former Newark Drive-In Property
Newark, New Jersey**

Submitted to:

New Jersey Turnpike Authority

P.O. Box 1121

New Brunswick, New Jersey

Submitted by:

Louis Berger & Associates, Inc.

100 Halsted Street

East Orange, New Jersey

September, 1986

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1.0 INTRODUCTION

The Newark Drive-In Movie Theater Site is located between two identified hazardous waste sites. To the north there is the Bayonne Barrel and Drum Company facility, a former drum reconditioner subject to a consent order after having been identified by USEPA as an unlicensed hazardous waste storage facility. To the south lies the Ashland Chemical and Arkansas Chemical site identified by NJDEP as containing or suspected of containing, hazardous wastes. The general area surrounding the Drive-In Movie Site is an industrial area with many other identified hazardous waste sites in close proximity. Therefore though the site's use as a movie theater did not make it subject to any hazardous waste regulations, it was determined prudent to undertake a minimal investigation to discover if any contamination is present at the site.

After this determination had been made but prior to commencing any investigation, excavation for a new theater building was witnessed and the existence of an underlying former landfill was noted.

The investigation undertaken was very limited with the sole intention of determining the existence or absence of contamination in the proposed Turnpike right-of-way. It was not intended at this stage to delineate the extent of contamination if it was found. In this regard there are no specific recommendations for further action appropriate at this time.

2.0 SITE DESCRIPTION

The Newark Drive-In Movie Site is located on Foundry Street, in Newark, N.J. (see Figure 1). It is bound by Foundry Street to the south, the Turnpike on the east and northeast, by Bayonne Barrel and Drum Company to the north, and on the west by US 1 and 9. Across Foundry Street there are a number of industrial properties including the aforementioned Ashland Chemical and Arkansas Chemical facilities. The property is in two lots, Block 5002, lots 11 and 12. The total site area is 19.2 acres.

Until it was disturbed by excavation, the site had been flat and covered in cinders with an asphalted perimeter road on the eastern and northeastern boundary. As a result of foundation work there are piles of material on the southwestern area of the site and an open pit, partly inundated on the northeastern area.

2.1 Site Characteristics

Current surface conditions at the former Newark Drive-In reflects a series of large crater-like depressions and mounds composed of demolition debris. These mounds and depressions are the result of the disruption of the Newark Drive-In for a planned multi-theater complex.

Most of the major disruptions took place in the northern half of the site with the southern half being more level. The deep depressions in the northern half allow for moderately rapid drainage of the southern portion into the depressions. Pondered water was evident most of the time in the depressions even during summer months with the water table being very close to the surface. There is no discernable drainage pattern to the site since the disruption occurred. Much of the mounded material consisted of large slabs of asphalt. Besides the asphalt the balance of the debris is mainly demolition material (brick, glass, cinders, sand, etc.). See Section 3.1 for a description of soil borings conducted in May 1985.

The Transco pipeline traverses the site along the extreme eastern boundary of the site. No structures, except for a chain-link fence and some wooden fences are present on the site.

2.2 Current Owner

The current owner of record of the site is Edle Realty Inc., c/o National Amusements, Inc., 200 Elm Street, Dearborn, Massachusetts.

2.3 Current Status of the Property

The property is a closed down drive-in movie site from which all buildings and equipment have been removed. Work was commenced to excavate the northwestern portion of the site in the spring of 1986, ostensibly for a movie theater site. This work has since stopped and no work was being undertaken at the site during the time of sampling.

2.4 Historical Use

Historical maps and photos indicate that the Newark Drive-In Theater began operation between 1951 and 1959. Prior to that time much of the site was used as a landfill.

The site is situated in an area which is believed to have been part of the tidal marshes associated with the lower reaches of the Passaic River. At some time, the area appears to have been covered with fill possibly for use as a construction base for nearby roads and industries.

Aerial photographs from 1934 to 1985 document the physical changes at the site. Figure 2 graphically displays changes which may have impacted the site's present environmental setting. The following is a chronologic narrative outlining these changes.

- 1934 - Aerial photographs taken in 1934 (exact date is unknown) showed that the site was largely covered by fill. The fill had apparently been in place for sometime as revegetation had already occurred. A subsequent landfill operation was observed dumping solid waste material over a substantial portion of the northern half of the site (A). According to a 1931 Sanborn map of this area, the southern half portion of the site was occupied by the Jersey Feed Farms' pig pens. Four buildings (B) associated with that facility were noted.
- 1940 - Aerial photographs taken on April 6, 1940 showed the Jersey feed farms area to be abandoned with only the building foundations and outside pens visible. The landfill operation in the northern portion of the site was still active and expanding.
- 1947 - Aerial photographs taken on April 28, 1947 showed the landfill at its greatest areal extent (C).
- 1951 - By April 7, 1951, the landfill was inactive and construction of the adjacent Turnpike was underway.
- 1959 - Aerial photographs taken April 16, 1959 showed that a drive-in theater had been constructed at the site. Portions of the old landfill were visible outside the eastern edge of the drive-in, although substantial revegetation had occurred.
- 1985 - Aerial photographs taken on April 25, 1985 show that a ramp from the Turnpike had been constructed in an area which, in 1959, had been part of the drive-in's parking area (D). At the southern end of the site, a small area of ground appears to have been recently disturbed (E). This disturbance may be due to recent dumping.

Table 6 (continued)

Sample #	M 1186	M 1187	M 1243	M 2050	M 2052	M 1218
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/L
Date of Submission	25-Apr	25-Apr	25-Apr	07-May	07-May	27-May
Location	G-1	G-2	COMP	WELL #3	WELL #3	WELL #3
Depth	0-18"	0-18"	0-18"	0-18"	8-10'	
Composite/Discrete	D	D	C	D	D	D
Soil/Water	S	S	S	S	S	W
Methyl Naphthalene	ND	ND	ND	ND	4,150	ND
Methyl Naphthalene	ND	ND	27,900	ND	ND	ND
Methyl Phenanthrene	10,500	ND	ND	ND	ND	ND
Methyl Phenanthrene	ND	ND	ND	ND	569	ND
Methyl Phenol	ND	ND	ND	6,190	ND	ND
Methyl-Methyl Ethyl Benzene	ND	ND	ND	ND	440	ND
Naphthalene, Decahydro, Trans	10,000	ND	ND	ND	ND	ND
Naphthalene, Decahydro, Trans	ND	ND	7,290	ND	ND	ND
Propyl Benzene	ND	ND	ND	0	353	ND
Tetramethyl Benzene	ND	ND	6,990	ND	ND	ND
Tetramethyl Benzene	ND	ND	ND	2,040	ND	ND
Trimethyl Benzene	ND	ND	6,120	ND	ND	ND
Trimethyl Naphthalene	ND	210,000	ND	ND	ND	ND
Trimethyl Naphthalene	ND	ND	ND	ND	627	ND
Xylene	ND	ND	6,810	ND	ND	ND
Xylene	ND	ND	ND	ND	236	ND
TOTAL PHENOLICS AND CYANIDES						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L
Phenolics, Total	0.32	0.63	0.08	2.80	1.5	<.05
Cyanide, Total	0.75	4.4	15	1.1	1.2	<.025
PCB						
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/L
Aroclor 1254	18,000 J1	ND	ND	ND	ND	ND
Aroclor 1260	ND	ND	ND	23000 J1	ND	ND
METALS						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/L
Antimony	1.7	1.4	5.6	15	6.7	3.1
Arsenic	26	1,200	25	760	46	2
Beryllium	0.11	0.46	0.46	0.6	0.44	ND
Cadmium	4	3.2	33	18	12	0.83
Chromium	43	60	860	240	240	1.4
Copper	91	250	2,560	690	530	7.8
Lead	1,390	740	4,100	3,000	1,840	ND
Mercury	2.4	1.3	3.7	3.9	11.1	ND
Nickel	38	120	340	120	73	ND
Selenium	ND	ND	ND	1.8	ND	ND
Silver	1.2	1.2	2.9	3.3	1.4	ND
Thallium	ND	0.14	0.63	0.26	0.29	ND
Zinc	500	2,120	2,830	2,190	1,900	29

J1- Estimated concentration; sample reextracted past holding time allowed under 40 CFR part 136

ECCR

**REVISED FINAL
REMEDIAL INVESTIGATION REPORT
OTTILIO LANDFILL
NEWARK, NEW JERSEY**

VOLUME I OF II

Prepared for:

**New Jersey Department of
Environmental Protection
Division of Site Remediation
CN-413
Trenton, NJ 080**

Prepared by:

**SMC Environmental Services Group
P. O. Box 859
Valley Forge, PA 19482**

Preliminary Draft: May 20, 1994
Draft: September 27, 1994
Final: March 31, 1995
Revised Final: September 15, 1995

Ref: 2000-10000

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drainage ditch. These leachate seeps represent ground water discharge in these areas.

Ground water beneath the Site is contaminated with respect to elevated volatile organics, metals, and certain other parameters (i.e., ammonia, chloride, sulfate, total dissolved solids). Elevated volatile organics and the highest metals contamination were detected in the eastern portion of the northern lot (Lot #16). The primary source of these contaminants in the ground water appears to be the infiltration and downward percolation of rain water through the contaminated surface and subsurface soil at the Site. Downward migration of the contaminated shallow ground water also appears to be contaminating ground water in the underlying sand aquifer.

2.5 Background Investigations

As part of the background investigations, a background data review of environmental information generated at the ECRR facility and a review of historical site maps was completed. Also, an industrial well survey as well as the evaluation of adjacent underground utilities was completed as part of the background investigations.

In addition to the ECRR data review, SMC also reviewed available files at NJDEP's Bureau of Underground Storage Tanks regarding ground water investigations completed on the Deleet Merchandising property, which is located immediately adjacent to the southwestern portion of the Site. The discussion of the results of our review of the Deleet ground water data is provided in Section 4.13 along with a discussion of the ECRR ground water data, and comparison of these two (2) databases to the Otilio ground water data.

SMC also contacted Mr. Russell Furnari, the Environmental Coordinator for the Essex Generation Station of PSE&G located east/northeast of the Site beyond the New Jersey Turnpike. SMC contacted Mr. Furnari in an attempt to obtain any available ground water quality information for the PSE&G facility. This information would have been used to establish ground water quality condition's hydraulically downgradient of the Otilio site. However, with the exception of three (3) shallow wells installed adjacent to an underground storage tank located in the far northeastern portion of the site, Mr. Furnari indicated that there were no monitoring wells located on the PSE&G property. Therefore, SMC could not establish a baseline for off-site downgradient ground water quality.

2.5.1 Essex County Resource Recovery (ECRR) Project Data Review

Prior to initiation of the Phase II field work, a review of available environmental data generated at the Essex County Resource Recovery (ECRR) facility, located immediately north of the Otilio Landfill, was undertaken. This review was

implemented in an effort to identify the type and level of contaminants present on the ECRR site, and to determine whether or not any of the wells previously installed at the ECRR facility could be used as part of the Ottilio Phase II RI. As discussed below, none of the ECRR wells were located in the appropriate positions which would allow their use in the Phase II RI.

The ECRR facility is located on a 25-acre site along the Passaic River directly north of the Ottilio Landfill as indicated on Figure 1-3 (Lots #68 and #92, Tax Block 5001). The property that currently comprises the ECRR facility was reportedly vacant until the mid 1960s when portions of the site were used for the storage of abandoned and junk automobiles. The property was originally acquired by the Newark Redevelopment and Housing Authority (NRHA) through condemnation proceedings. NRHA purchased the property for potential resale and development to Combustion Equipment Associates (CEA), which proposed a refuse processing facility on the Site. After the NRHA property purchase, the CEA experienced project funding problems and the proposed facility concept was abandoned (Versar, Inc., 1986). The NY/NJ Port Authority became involved with the site in the early 1980s and purchased the site from the NRHA with the intent to remediate and subsequently construct the Resource Recovery Facility. The facility is currently operating as a co-generation plant (i.e., trash to steam).

The remainder of this section provides a brief chronology of the environmental investigations and subsequent remedial activities which have been completed at the ECRR property. A majority of the information summarized below was provided to us in the forms of reports and miscellaneous project files by to us by Mr. Chuck King, Principal Management Engineer, Regional Development Department of the Port Authority of NY and NJ, at the ECRR facility during our site visit on January 13, 1993. A comparison of the types and levels of contaminants detected in the various media sampled at the ECRR property versus those detected at the Ottilio site is included in Section 4.13. A detailed discussion of the results of the analysis of samples collected on the ECRR property but near the Ottilio site, along with a Figure showing these locations is provided in Section 4.3. However, a summary of the sampling that was completed at the ECRR facility is provided below.

SMC reviewed site plans developed by Gibbs & Hill, Inc., dated 1984. These site plans indicate that several soil borings and test pits were installed at the ECRR site sometime in 1978. However, SMC could not find any reports associated with the Gibbs & Hill, Inc. site plans. Therefore, SMC can not verify if any investigations were completed at the site in 1978.

As reported by the Versar, Inc. (1986), the first documented site investigation was conducted by the Design Division's *Environmental Unit and Geotechnical Section* for the Port Authority of NY & NJ (Port Authority) in 1982. As part of this investigation, fourteen (14) ground water monitoring wells were installed at the site. Of these, nine (9) were completed as shallow wells (completed above the organic silt

layer), four (4) were completed as intermediate wells (completed below the organic silt layer) and one (1) was completed as a deep well (completed in the bedrock). Several soil samples were collected from each of the borings, and the wells were subsequently sampled. During this investigation, a visual inspection of the property revealed the following (Versar, 1986):

- o One hundred to two hundred drums, open and closed, some full, some empty and some partially full, the contents of which are unknown; located in the northern section of the site.
- o There is one (1) tank truck, the contents of which were unknown, located in the northwestern section of the site.

The results of the Port Authority's 1982 investigation were documented in a report dated February 1983. ~~Based on a review of this report, none of the thirteen (13) subsurface soil samples contained any significant concentrations of PCBs (based on comparison to a total PCB level of 50 ppm), and only one (1) of the thirteen (13) samples displayed total petroleum hydrocarbons above the NJDEP's current soil cleanup criteria of 10,000 ppm.~~ Also, none of these samples were characteristically hazardous based on the results of the E.P. Toxicity testing completed on each sample. However, there were a number of compounds detected in the subsurface soil at the ECRR site that exceeded then published NJDEP Cleanup Criteria (1982). The significant compounds and their highest on-site concentrations are as follows: Benzene (1.23 ppm), Toluene (8,000 ppm), Bis (2-Ethylhexyl) Phthalate (0.041 ppm) and Phenol (4.95 ppm). Results of ground water samples indicate that contaminated ground water was generally confined to the shallow system and some of the compounds detected exceeded then published N.J. ground water criteria (1982). The compounds most consistently detected in the ground water along with their highest concentrations are as follows: benzene (1,230 ppb), ethylbenzene (660 ppb), methylene chloride (2,590 ppb), chloroform (330 ppb) toluene (8,000 ppb), bis(2-Ethylhexyl)phthalate (57 ppb) and phenol (4,950 ppb). The most contaminated well was RR-2.

In about October 1983, the NJDEP met with the Port Authority to discuss on site contamination, existing data, further sampling needs, and appropriate mitigation measures.

In late 1983 to early 1984, the Port Authority implemented additional site investigations. These investigations included the: 1) collection of ambient air samples across the site and the screening of these samples with a photoionization organic vapor analyzer; 2) implementation of a ground penetration radar survey; 3) evaluation of ground water flow conditions; 4) resampling of the existing site wells; 5) collection of six surface soil samples; 6) collection of storm water samples from three different locations in the drainage ditch which bisected the site from north to south and drained

in a northerly direction; and 7) the collection of two (2) ground water samples from off-site industrial facilities located west/southwest of the site.

Results from this investigation, which were documented in a July 1984 report, indicate that no areas on-site displayed volatile organic vapors above 5 ppm in the ambient air. The ground penetrating radar survey did not identify any areas which possibly contained large amounts of buried drums. The direction of ground water flow in the shallow system was influenced by on-site topographic highs and the drainage ditch which bisected the site. Ground water in this system flowed towards the drainage ditch and in the intermediate system, it flowed primarily toward the north. The results of the resampling of the wells generally indicated the presence of the same parameters as were detected in these wells in 1982 but at lower concentrations. Well RR-2 was still the most contaminated. The surface soil samples all contained a few volatile organics, semi-volatile organics and metals. The most consistently detected compounds along with their highest concentration included: methylene chloride (395 ppm), ethylbenzene (6.05 ppm), benzo(a)-anthracene (2.87 ppm), benzo(a)pyrene (2.6 ppm), bis(2ethylhexyl)phthalate (22.6 ppm), arsenic (67 ppm), chromium (96 ppm), lead 510 ppm), zinc 1,300 ppm), and phenols (3,160 ppm). The storm water samples generally contained one (1) or more of the following compounds with the highest concentration of the compounds indicated in parentheses; benzene (15 ppb), 1,1,1-trichloroethane (15 ppb), copper (30 ppb), lead (590 ppb), mercury (0.6 ppb), silver (40 ppb), zinc (70 ppb). The two (2) off-site ground water samples, which appear to have been collected from wells located hydraulically upgradient of the site generally contained one (1) or more of the following compounds with the highest concentration of the compounds indicated in parentheses; 1,1-dichloroethane (12 ppb), 1,2-transdichloroethylene (121 ppb), tetrachloroethylene (17 ppb), trichloroethylene (447 ppb), copper (450 ppb), and zinc (1,500 ppb).

In October 1984, the NJDEP issued the NRHA a directive letter to initiate remedial measures on site regarding surface containers and subsurface contamination. The NRHA subsequently entered into an Administrative Consent Order in January of 1985 with the NJDEP to conduct necessary remedial measures.

In January 1985, the Cavanaugh Group was retained by the NRHA to begin remediation at the site. The objective of the site remediation was to sample, remove and properly dispose of all drums, tankers and cylinders located on site as well as all associated contaminated soil. The Cavanaugh group removed a total of 665 overpacked drums, 70 gas cylinders, 26 cubic yards of crushed drums and 88.7 tons of soil during remediation activities for disposal at a hazardous waste disposal facilities. An additional 5,885 cubic yards of soil and debris were removed for disposal at an ID 27 (Industrial Waste) landfill. During the site remediation activities, two (2) additional "hotspots" which contained contaminated soil were identified. These "hotspots" were not however remediated by the Cavanaugh Group.

Remediation activities were completed by June 1985. The results of the remedial activities were documented by the Cavanaugh Group in an undated report.

In November 1985, Weston, under the supervision of the NJDEP, arrived on the ECRR site in order to investigate the two (2) "hot spots" identified by the Cavanaugh Group, one located in the southwest portion of the site referred to by Weston as the "RR2/3 Area" and the other at the western edge of the Transco/PSE&G easement line referred to by Weston as the "Tire Pit Area". Weston developed a test pit program to delineate the horizontal limits of the "hot spots". A total of fourteen (14) test pits were excavated in the Weston designated RR2/3 Area. These fourteen (14) test pits were field identified as being clean. A total of twenty-four (24) clean and dirty test pits were excavated at the Weston designated Tire Pit Area covering a 400 square foot area. Samples collected during these activities detected compounds with high levels of contamination which also suggested that the contamination extended beyond the limits of the two "hotspots". The most consistently detected compounds along with their highest concentration are as follows: petroleum hydrocarbons (36,000 ppm), bis(2-ethylhexyl)phthalate (2,100 ppm), lead (917 ppm), benzene (140 ppm), ethylbenzene (1,600 ppm), toluene (8,500 ppm) and naphthalene (22,000 ppm). The results of these activities were documented in a report prepared by Weston dated January 1986.

In February 1986, Storch Engineers, under the supervision of the NJDEP, completed additional subsurface investigations at the site to identify the limits of the contaminated soil in the area of the two "hotspots". Storch Engineers developed a 50-foot grid system over the two areas and then excavated twenty-five (25) test pits in field determined locations. The test pits were sampled and results indicated that there were a number of compounds detected in the soil in the area of these test pits. The most consistently detected compounds and their highest concentrations are as follows: ethylbenzene (2.8 ppm), methylene chloride (4.19 ppm), 1,1,1-trichloroethane (.17 ppm), anthracene (7.48 ppm), benzo(a)anthracene (11 ppm), benzo(b)pyrene (7.87 ppm), bis(2-ethylhexyl)phthalate (279 ppm), di-n-butyl phthalate (4.08 ppm), fluoranthene (33.8 ppm), pyrene 28 (ppm), Aroclor 1254/1260 (5.7 ppm), and benzo(b)fluoranthene (8.02 ppm).

In June 1986, Versar Inc. completed a Risk Assessment for the NJDEP by combining the results of the five (5) previous site investigations. The risk assessment concentrated on the two (2) hotspots which had not yet been remediated. The contaminants of concern used in Versar's Risk assessment included lead, arsenic, cadmium, chloroform, tetrachloroethylene, benzene, petroleum hydrocarbons, pyrene, benzo(a)pyrene, and bis(2-ethylhexyl)phthalate. Based on the results of the risk assessment, Versar concluded that inhalation posed the only significant exposure risk to human health or the environment. As a results of this evaluation Versar subsequently evaluated several remedial alternatives associated with the risk posed by the two (2) "hotspots".

In July 1986, the Engineering Department for the Port Authority of NY & NJ completed a subsurface investigation at the proposed site of the access roadway for the ECRR facility. The investigation consisted of the collection of surface and subsurface soil samples, ground water, surface water and sediment samples along the length of the proposed access road. Surface soil results revealed a number of compounds detected beneath the ECRR access road right-of-way (ROW) with high levels of contamination. The significant compounds and their highest concentrations are as follows; benzo(a)anthracene (3.1 ppm), benzo(a)pyrene (2.3 ppm), bis (2-ethylhexyl)phthalate (31 ppm), pyrene (5.7 ppm), 4,4' DDT (0.993 ppm) and 4,4' DDD (2.525 ppm). Subsurface soil results also indicated that there were a number of compounds detected in the subsurface soils beneath the ECRR access road right-of-way with high levels of contamination. The significant compounds and their highest concentrations are as follows: benzo(a)anthracene (2 ppm), benzo(a)pyrene (1.6 ppm), bis(2-ethylhexyl)phthalate (0.7 ppm), pyrene (27 ppm), 4,4' DDD (0.806 ppm) and PCB-1260 (1.055 ppm).

This investigation also included the collection of one (1) composite sediment and one (1) composite surface water sample collected at the point where the ECRR access road crosses Lawyers Ditch. Results of the sediment analysis revealed a number of compounds including benzene (84 ppb), chlorobenzene (50 ppb), ethylbenzene (20 ppb) and bis(2-ethylhexyl)phthalate (95,000 ppb). The surface water sample collected at the same location indicated that there were no measurable amounts of organics detected in the water sample; however, there were several inorganic compounds present in the sample. Ground water samples collected from three (3) newly installed monitoring wells along the ECRR access road right-of-way indicated the only measurable amount of organic contaminant detected was chloroform (17 ppb).

In the Port Authority's report dated July 1987, they indicate that the level and types of contaminants detected in the soils and sediments were consistent with the industrial nature of the surrounding area. There was no indication that any "hotspots" existed. Also, the types and levels of contaminants detected in the shallow ground water was consistent with the Newark metropolitan area.

In September 1988, the Engineering Department for the Port Authority of NY & NJ issued a Supplementary Environmental Subsurface Investigation to the initial program in 1987. This supplementary report focused on the investigation of subsurface soils along the proposed ECRR access road right-of-way. Based on this supplementary investigation, the Port Authority concluded that no "hotspots" occurred along the route of the proposed roadway, and that excavations along the right-of-way would not disturb material that could pose environmental or health hazards.

A comparison of data included on soil boring and monitoring well logs for both the ECRR site and Ottilio Landfill indicate general similarities between the geologic setting for the two sites. Each site consists of four (4) individual and well defined stratigraphic layers.

The ECRR site is generally covered with a layer of heterogeneous fill material, which ranges in thickness from five to twenty feet. This fill material is generally composed of silt, sand, and gravel intermixed with construction debris. The fill material is underlain by an organic layer consisting of silt and peat and ranges in thickness from five to twenty feet. This organic layer is generally thinnest along the southern portion of the site and thickens towards the north. A medium to fine grain sand sequence is located directly beneath the organic layer and ranges in thickness from fifteen to thirty feet.

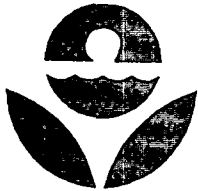
This medium to fine grain sand sequence is underlain by a clayey silt layer, which ranges in thickness from five to twenty feet. The clayey silt layer is very dense and contains traces of rock fragments from the shale bedrock layer located directly beneath this layer. The shale bedrock is generally encountered at a depth of 60 to 80 feet beneath the surface of the site.

2.5.2 Local Industrial Well Inventory

All available information concerning industrial wells within a one-half mile radius of the Site were collected in an effort to better define local ground water flow conditions. The primary objective of this well inventory was to determine if off-site industrial wells are influencing ground water flow conditions at the Site. As part of these activities, an NJDEP computerized well search for the areas within a one-half mile radius of the Site was completed. The results of these search are discussed below and included in Appendix B.

SMC personnel visited the NJDEP offices in Trenton, NJ and completed a 1/2-mile radius well search around the Ottilio landfill. Results of this well search indicate that there are no residential wells or other water supply wells used for potable purposes located within the 1/2-mile radius. The only wells located within the 1/2-mile radius are used for ground water monitoring purposes or industrial (i.e., cooling, fire protection, etc.) uses. A copy of the Well Records obtained as part of the well search and a figure displaying the location of these wells in relation to the site are included in Appendix B. Originally, it was believed that the car wash located immediately southwest of the Site owned and operated a pumping well; however, upon further investigation and based on personal communications with a representative of the car wash on August 26, 1994, no pumping well exists at this location. The car wash representative also indicated that they have always obtained their water from the City of Newark.

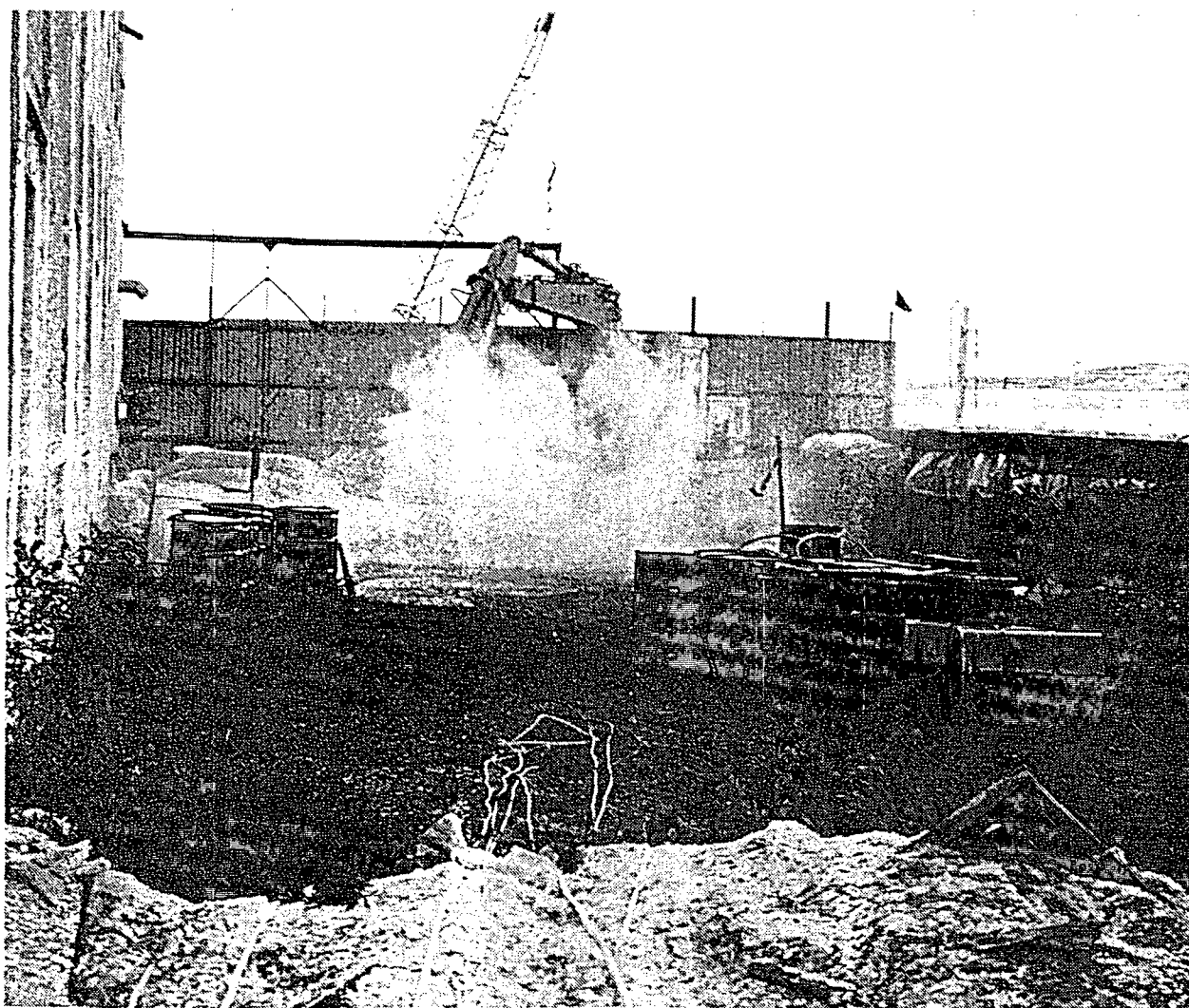
Commercial Solvents



U.S. Environmental Protection Agency Region II
Emergency and Remedial Response Division
Removal Action Branch

On-Scene Coordinator's Report
International Metallurgical Services Site
Newark, Essex County, New Jersey

OSC: John Shaw



Prepared by:

Roy F. Weston, Inc.

Major Programs Division

In Association with ICF-Kaiser Engineers Inc., C.C. Johnson & Malhotra, P.C.,
Resource Applications, Inc. and R.E. Sarriera Associates

932520381



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II DEPT. OF ENGINEERING
EDISON, NEW JERSEY 08837

MAY 21 3 18 PM '90

Paul B. report

May 17, 1990

Mr. Alvin L. Zach P.E., L.S.
Director
City of Newark, Department of
Engineering
920 Broad St.
Newark, New Jersey 07102

Dear, Mr. Zach:

In compliance with 40 CFR 300.165(a) of the National Oil and Hazardous Substances Contingency Plan, enclosed please find the On-Scene Coordinator's (OSC) Final Report for the International Metallurgical Services Site, Newark, Essex County, New Jersey. This report covers USEPA funded activities undertaken from June 16, 1987 to February 28 1990.

If you have any questions or comments, please contact me at (201) 906-6827.

Sincerely Yours,

John J. Shaw
John J. Shaw, On-Scene Coordinator
Removal Action Branch

Enclosure

*COMMONWEALTH
SOLVENTS /*

IMC

932520382

BBE000015

ON SCENE COORDINATOR'S REPORT
INTERNATIONAL METALLURGICAL SERVICES
NEWARK, NEW JERSEY

SITE IDENTIFICATION NUMBER: 1-C

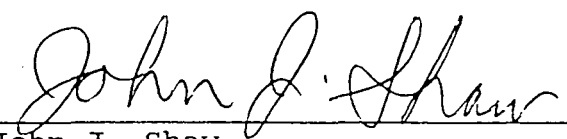
Prepared For:

Removal Action Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II
Edison, New Jersey 08837

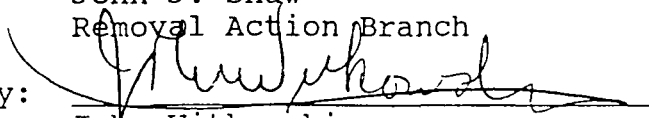
Prepared By:

Technical Assistance Team
Roy F. Weston, Inc.
Edison, New Jersey 08837

Concurred By:


John J. Shaw
Removal Action Branch

Reviewed By:


John Witkowski
Removal Action Branch

Date of Release:

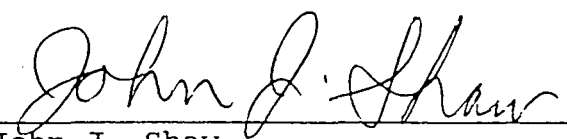

April 26, 1990

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ON SCENE COORDINATOR'S REPORT
INTERNATIONAL METALLURGICAL SERVICES
NEWARK, NEW JERSEY

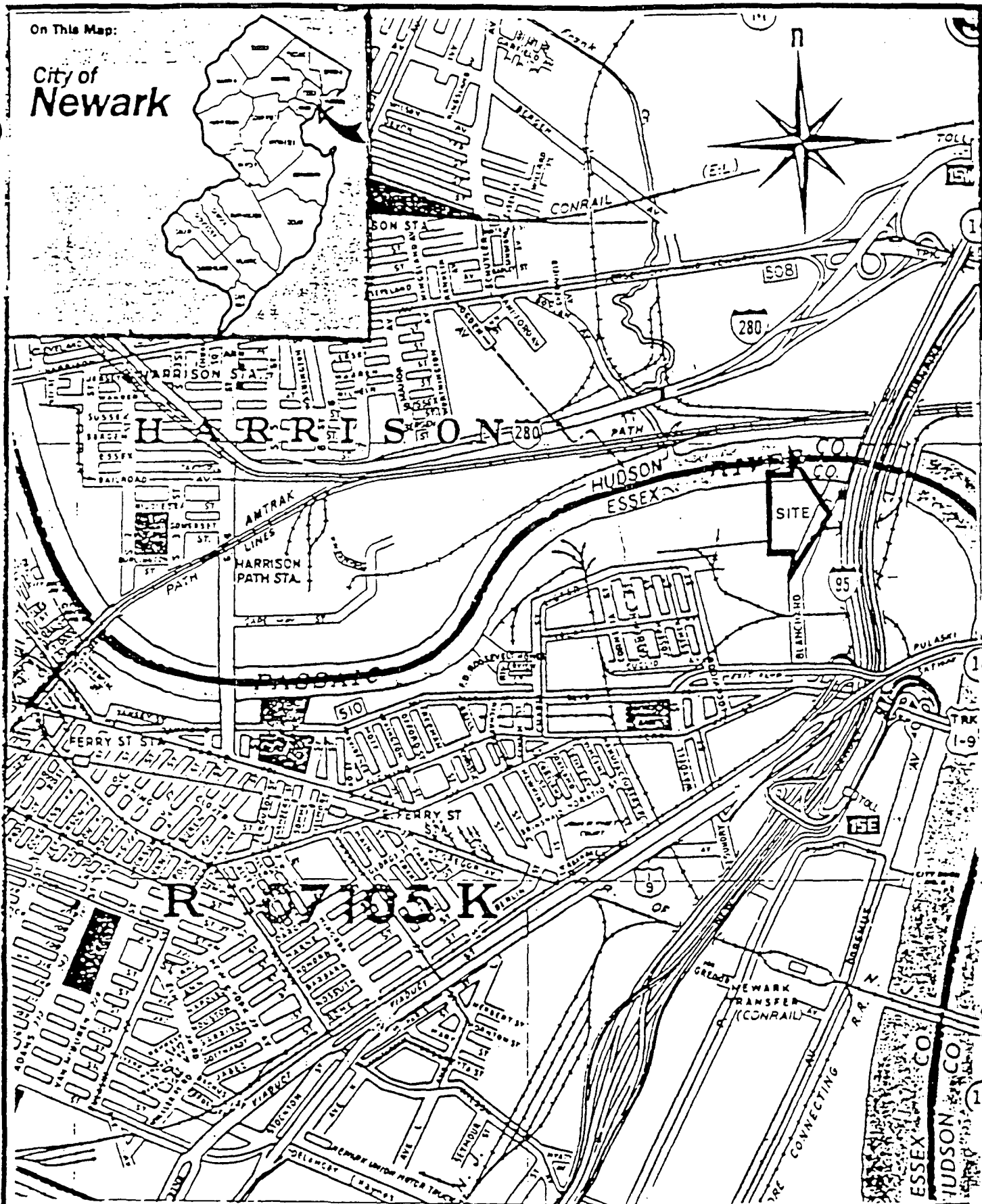
1.0 INTRODUCTION

1.1 Site Setting and Description

The International Metallurgical Services Company (IMS), is an abandoned precious metals refining facility located at 196 Blanchard Street, Newark, New Jersey. The property occupies approximately 45,000 square feet of land in an old industrial section in Newark's Ironbound district. The site is bordered to the north by the Passaic River, to the east by the Norpack Corporation, to the south by Pigments and Colors Corporation, and to the west by Blanchard Street. A map showing the location of the Essex County site is attached (refer to Figure 1).

The property is situated next to a densely populated residential and commercial neighborhood, where more than 35,000 people live and work within a one mile radius of the site. The New Jersey Turnpike (Route 95) is located less than 500 yards to the east, while a busy tavern is located across the street 40 feet to the west. The perimeter of the property is clearly defined by a secure corrugated steel fence that stretches along the south and west end of the

City of
Newark



WESTON

EPA PM

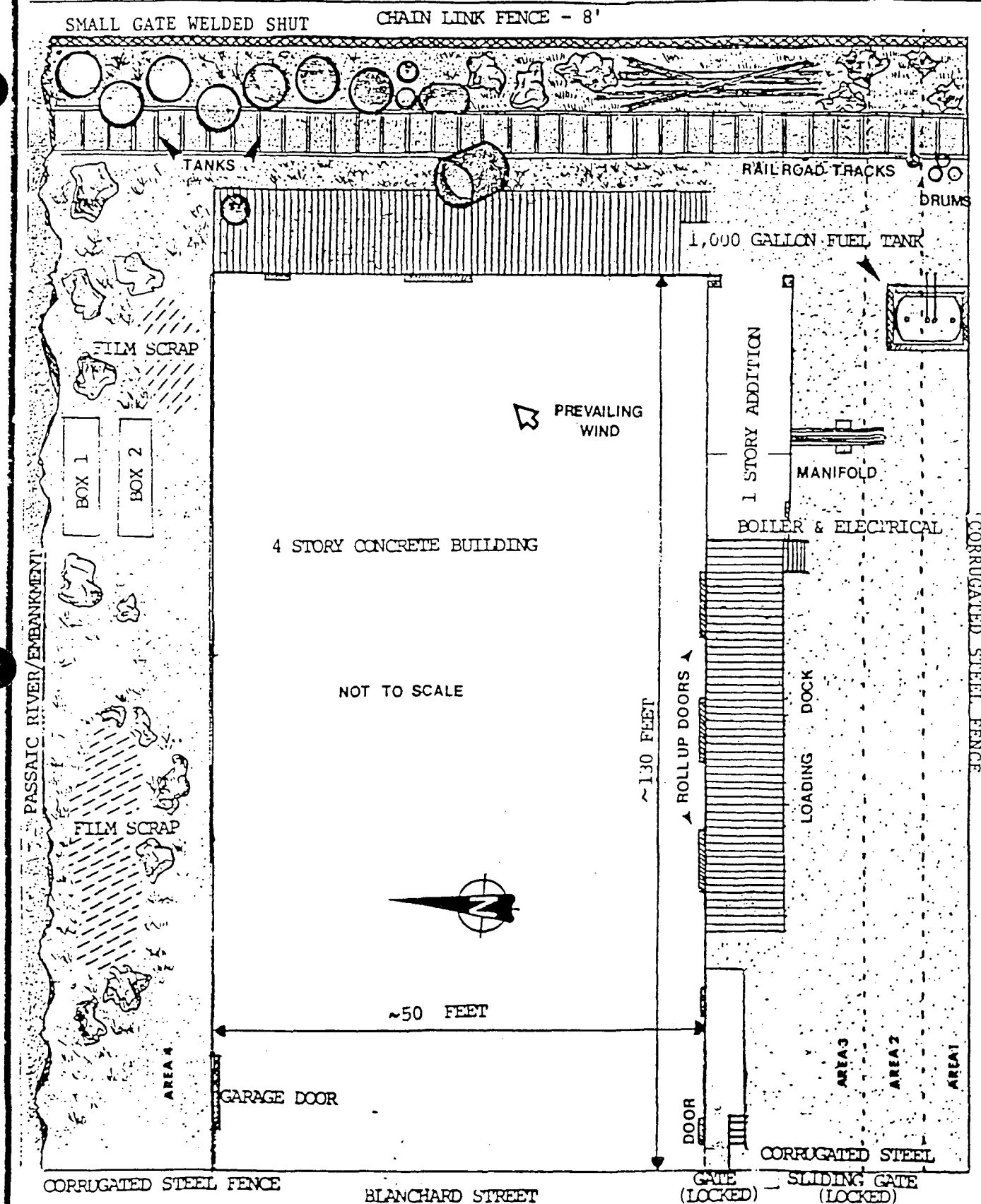
SITE LOCATION

TAT PM

FIGURE 1

site, and by a chain linked fence that runs along the east end of the property. The north end of the property is open to the Passaic River. A sliding vehicle gate located on the west end of the corrugated steel fence provides easy access onto the site from Blanchard Street.

Within the fence line is a four story apparently structurally sound brick building surrounded by a grassy lot to the north, south and east. Approximately 30 cubic yards of spent photographic film was found on the north end of the lot. The piles were situated about twenty yards from the Passaic River. Laboratory analysis of the film has shown that it contains cyanide and silver in varying concentrations. Scattered around and near the piles were scrap metal, tanks, pipes and miscellaneous debris. Tanks and railroad ties can be found on the east end of the lot, while a 1000 gallon tank and tank wagon loading and unloading station can be found on the south end of the lot. Markings on the manifold indicate that it may have been used to pump methanol, isopropanol, cellosolve, butylacetate, ethylacetate, and nitropropane. These substances may have been stored in the tanks located on the third floor of the building. A detailed map of the site property is attached, (refer to Figure 2).


WESTON
CONSULTANTS

 SPILL PREVENTION &
 EMERGENCY RESPONSE DIVISION

EPA PM

JOHN SHAW

SITE LAY OUT

 In Association with ICF Technology Inc., C.C. Johnson & Associates,
 Inc., Resource Applications, Inc., Geo/Resource Consultants, Inc.,
 and Environmental Toxicology International, Inc.

TAT PM

DAVE TRIGGS

FIGURE 2

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The four story building is an all concrete and brick structure, constructed on piles, one to two feet above grade and is approximately 50 to 130 feet in length. A one story addition accessible only from the outside, is attached to the southeast corner of the building. A section of the addition was used to house the boiler and electrical panels to the building. The other section, which is open to the outside, contains two large crucible type vessels. Steel rollup doors can be found on three sides of the building. Three along the south wall, and one on the east and north walls. There are rollup doors on each of the four floors on the east side of the building. A hoist located just outside the fourth floor roll up door is capable of raising and lowering materials within the building to a wooden loading platform that spans the east and south walls of the building.

The first floor of the building consists of offices, a laboratory, a reception area, a locker room and a warehouse. Approximately 60 percent of the floor space is occupied by the warehouse. The laboratory, measuring 12 feet by 20 feet, housed over 50 containers of chemical reagents ranging in size from several ounces to a gallon. More chemicals along with furniture, and paper debris were found scattered haphazardly throughout the office area. Cardboard, machinery parts, three empty 400 gallon mixing vessels, fire

bricks, a possible heat treatment vessel and containers varying in size were found in the warehouse area.

The second floor is divided into four walled off areas where approximately 50 containers and drums ranging in size from one gallon to fifty-five gallons were found along with two large mixing vessels. Three area on the floor are segregated by a steel mesh wall. One area, littered with metal scrap and a drum of aluminum powder may have been used as a maintenance shop. Drums and containers were found in the other two caged areas on the floor. A room used to store tools and equipment was found to contain four bottles of methyl ethyl ketone (MEK) peroxide, a shock sensitive material. Labels found on other containers indicate that they might have contained nitric acid, sulfuric acid, sodium hydroxide, sodium cyanide, formic acid, paints and paint thinners. Containers without any labels or markings were considered unknowns until sampled and analyzed.

The third floor is divided into two walled off areas and one partially walled off area. Rows of empty tanks ranging in size from 5,000 gallons to 8,000 gallons occupy all three areas. Containers ranging in size from 5 gallons to 55 gallons were found in a corridor that separates the two main

rooms. Labels and/or markings indicated that the containers may have held nickel powder, zinc powder, peroxides and many unknowns.

The fourth floor is divided into three walled off areas. Two of the areas make up store rooms, one located on the northwest corner of the building and one on the southwest corner. The third area is located roughly at the center of the floor, houses a single empty tank. A small caged off area connects to the tank room, as well as a large vault used to store bars of gold and silver during the facilities operation. Another caged off area located next to the northwest store room was found littered with many containers and laboratory reagents ranging in volume from one ounce to thirty gallons. The containers were found piled haphazardly amongst paper and other miscellaneous debris. Labels and/or markings on some of these containers indicated that they may have contained phenols, vanadium pentoxide, sulfurous acid, mercuric iodide, ethyl acetate and pyridine. A diagram, Figure 3, lists the toxicity of some of the substances mentioned.

An inoperable elevator is located at the approximate center of the building. It serviced at one time all four floors. Stair wells that also provide access to all four floors are located at the northeast and southwest corners of the

The potential health effects from several specific compounds tentatively identified are shown below:

Health Effects

1. Carcinogenicity
2. Teratogenicity
3. Liver Damage
4. Kidney Damage
5. Lung Damage
6. CNS Affects
7. Mutagenic
8. Irritant
9. Toxic by Inhalation
Ingestion or Dermal
Contact

Compounds Found									
Phenol			X	X		X		X	X
Cyanide			X	X		X			X
Hydrogen sulfide					X			X	X
Hydrazine hydrate	X	X			X	X	X		X
Pyridine			X	X		X			X
Chlorine					X			X	X
Chromic acid	X				X			X	X
Arsenious acid	X		X	X					X
Sulfur dioxide				X				X	X
Nitric acid				X				X	X
Asbestos	X			X	X				X



SPILL PREVENTION &
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Inc., Resource Applications, Inc., Geo/Resource Consultants, Inc.,
and Environmental Toxicology International, Inc.

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DAVE TRIGGS

FIGURE 3

building. Complete diagrams detailing the layout of each floor is attached (refer to Figures 4,5,6 and 7).

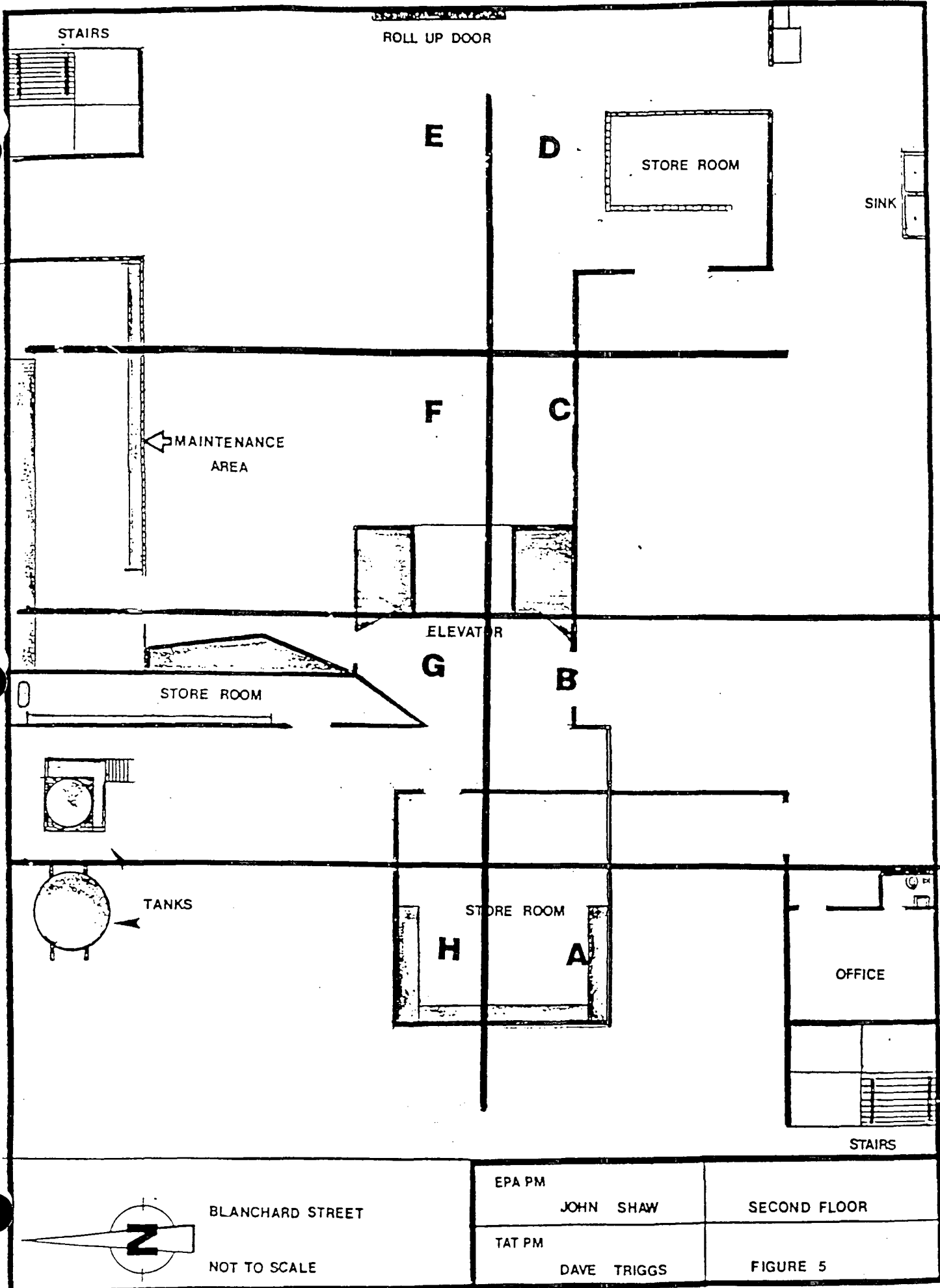
1.2 Initial Situation

In August 1986, a Newark Fire Department inspection reported the site to the officials of the City of Newark and the New Jersey Department of Environmental Protection (NJDEP). The NJDEP performed a preliminary site assessment. It was reported that there were over 50 drums, 450 laboratory containers, 50 storage tanks and miscellaneous debris. Leaking drums of chemicals were found. Outside the building, piles of spent photographic film were found.

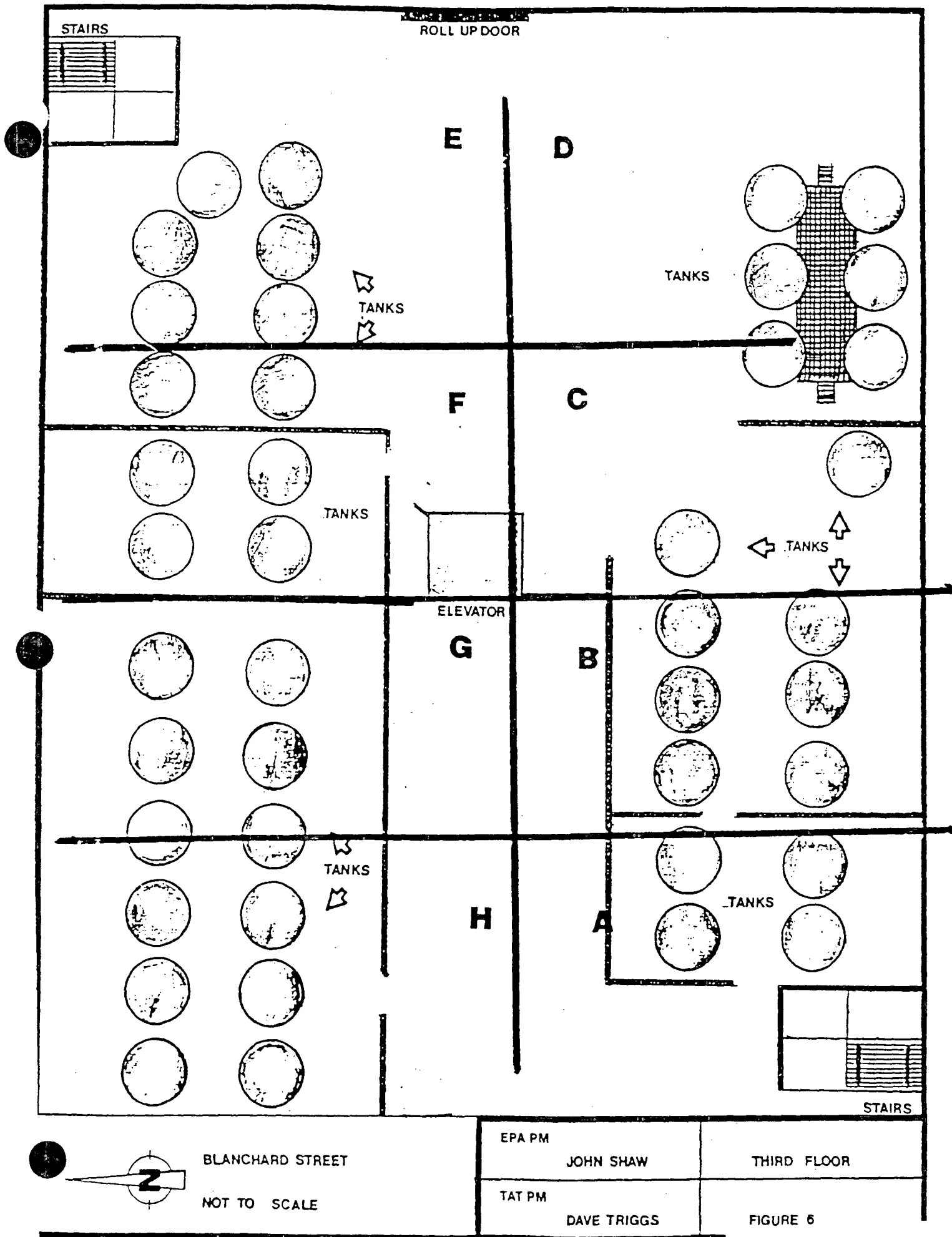
The NJDEP did not do any sampling but from the labels on laboratory bottles and drums, hazardous materials were noted such as alkalis, acids, ignitables, peroxides, nickel powder, zinc dust and shock sensitive including methy ethyl ketone peroxide.

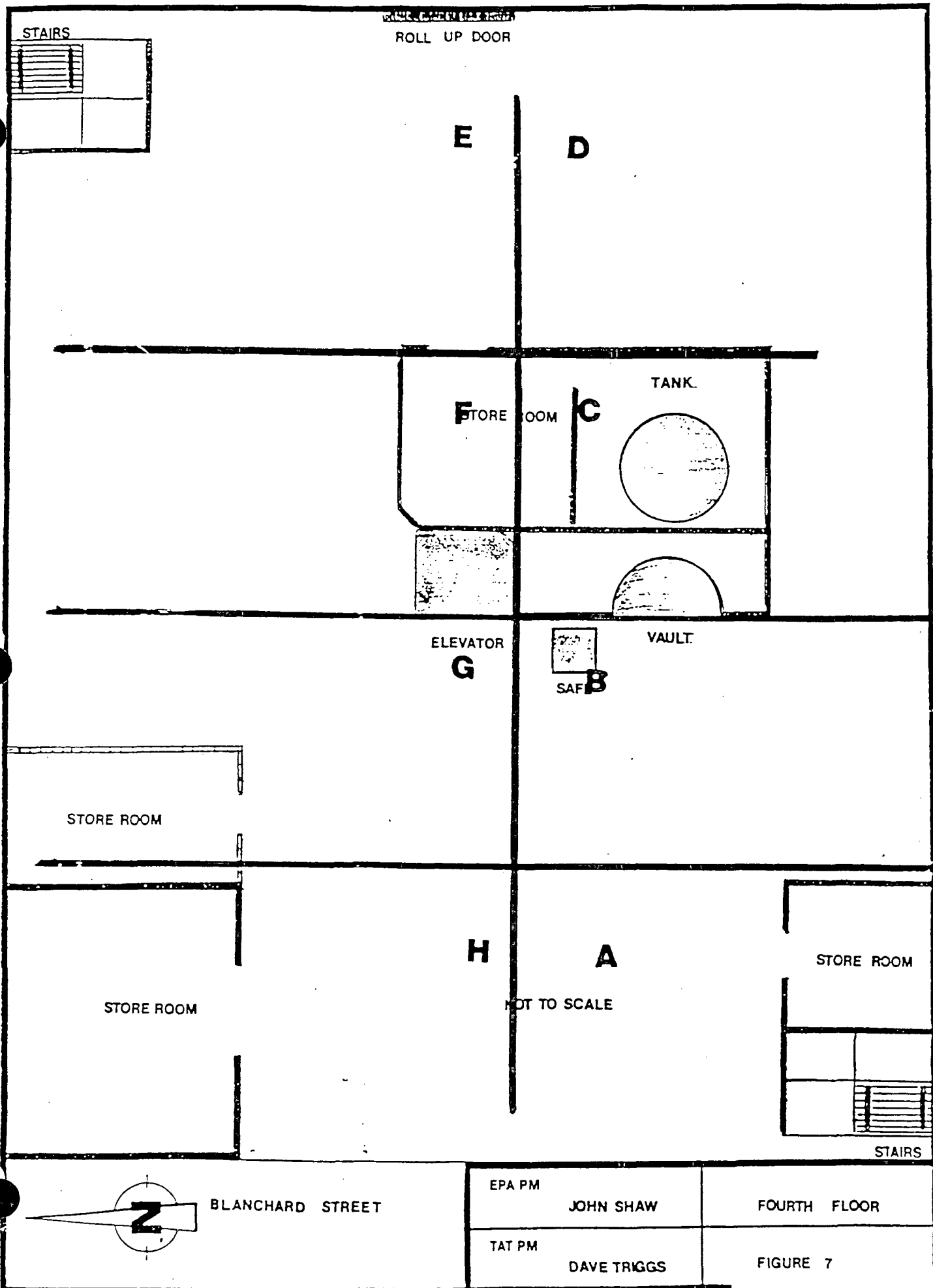
The Police and Fire Departments continued to report break-ins and vandalism.

In June 1987, the NJDEP requested that the United States Environmental Protection Agency (EPA) take appropriate remedial actions at the site.



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In June and July, 1987, site assessments were conducted by the EPA and its Roy F. Weston Technical Assistance Team (TAT). The inspections confirmed the assessment by the DEP, and in addition air monitoring revealed the presence of hydrogen cyanide, organic vapors and asbestos. Also, asbestos was found in the insulation on the elbow of piping at the main entrance to the building.

1.3 Site History

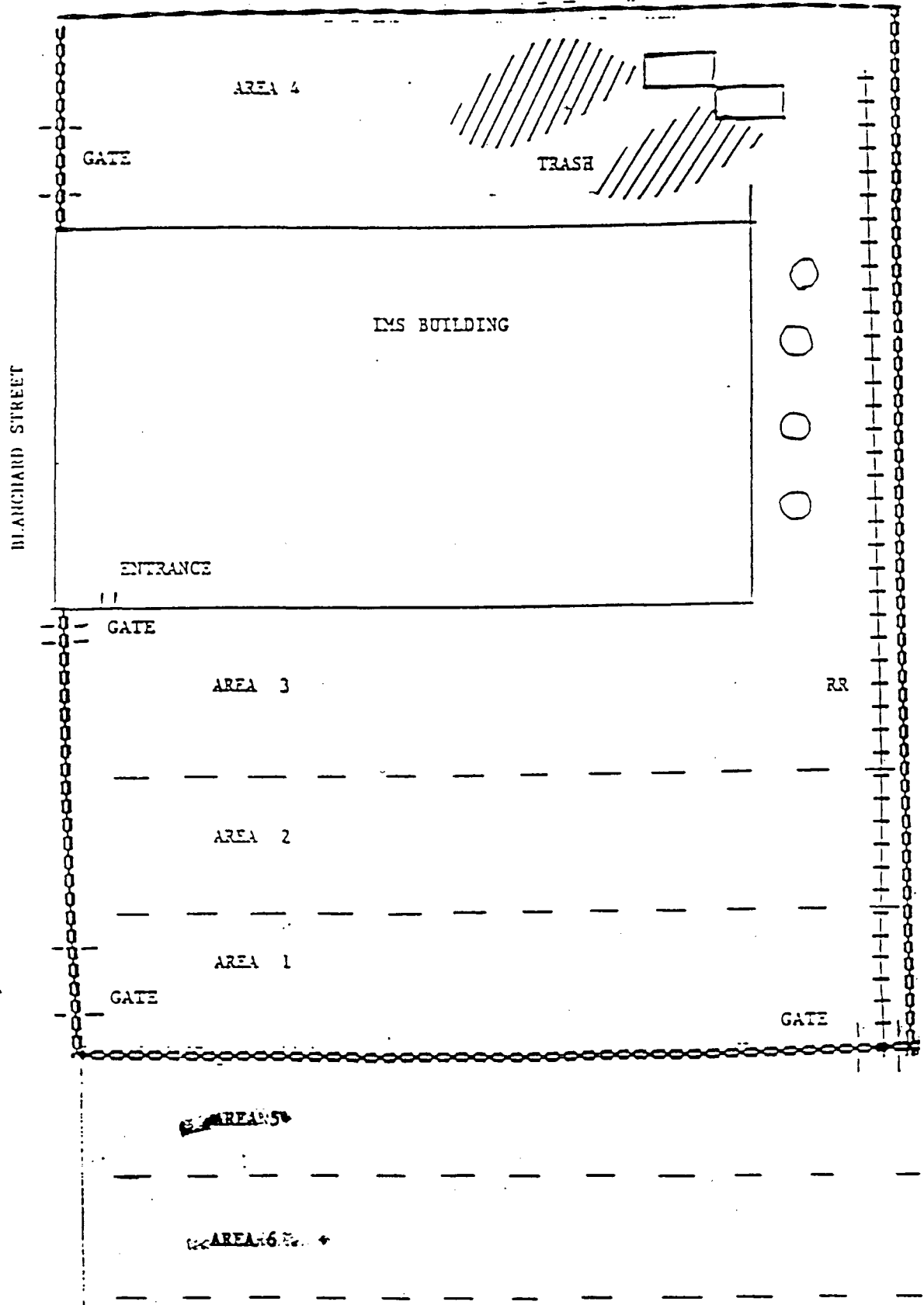
I.M.S was a precious metals refining facility that operated up until November 1984. The facilities principal operation involved the recovery of silver from spent photographic film, the recovery of gold from used electronic circuit boards, and the upgrading of medium grade gold to bullion grade. I.M.S. filed for Chapter 11 on April 15, 1982. The filing was changed to involuntary Chapter 7 on January 6, 1986. Salable equipment was then auctioned off by the court appointed trustee, Santo J. Lalomia, Esq. After payment was made to creditors, the reported assets remaining were approximately \$1,700 in cash plus the value of the property. The site was left abandoned with many different types of dangerous materials both inside the building and outside throughout the grassy lot, where the chances of human contact were high. In the interim, the City of Newark refused to foreclose on some \$98,000 in back property taxes.

A formal request by the State was also made to the USEPA to assist in removal of the dangerous materials that still remained on-site. The site had been subject to numerous break-ins during its abandonment.

1.4 Cause of Discharge(s)

Approximately 30 cubic yards of finely cut up spent photographic film were found on the northern lot in piles, completely exposed to the environment. Laboratory analysis of the film (which is situated about thirty feet from the Passaic River) revealed the presence of both cyanide and silver. Soil samples taken at designated quadrants throughout the grassy lot have shown elevated levels of heavy metals, principally copper, lead, mercury, silver, and beryllium. The highest levels of beryllium were found on the south side of the building in areas 1,2, and 3. (See Figure 8, Soil Sampling Map). A partially decomposed fiber drum was found lying on the southwest lot with its contents (a white crusty substance) spilled onto the ground. Containers of nickel powder and zinc powder were found with some of their contents spilled, on the east end loading dock. Many of the drums and containers inside of the building were found without lids. Some drums had leaked. Air samples taken inside of the building revealed the presence of asbestos and cyanide in the air. Both are considered to be hazardous substances.

PASSAIC RIVER



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM
JOHN SHAW

FIGURE 8

In Association with ICF Technology Inc., C.C. Johnson & Associates, Inc., Resource Applications, Inc., Geo/Resource Consultants, Inc., and Environmental Toxicology International, Inc.

TAT PM
MICHAEL MENTZEL

Soil Sampling Map

932520404

MSLA 1D

932520406



Hackensack Meadowlands Development Commission

Memorandum

TO Theodore J. Fischer, Division of Design, Area II, N.J.D.O.T.

FROM John T. Bolan, HMDC *JB* Date January 4, 1980

Subject Liner Damage in the Kearny Disposal Area

Based upon a review of the monitoring data for wells 1A, 1B, 1C, and 1D, in the Kearny Disposal Area (see attached map), one of the wells, 1D, appears to show increasing concentrations of BOD₅, COD and Chlorides. Additionally, a recent physical inspection of the well reveals a black liquid in the bottom of the well.

Therefore, it appears that the liner enclosing the disposal area has been damaged. Since the liner material is compacted sand, a non-cohesive soil, corrective actions will be needed before further damage to the liner occurs.

At this point, it is not possible to determine if the materials in the disposal area are leaching into the surrounding soils. It is recommended that additional testing, commencing as soon as possible, be undertaken to identify the magnitude of the liner damage. Sampling of wells 1A, 1B, 1C, and 1D, on a bi-weekly basis, during a two month period for Petroleum Hydrocarbons only, (EPA Silica Gel & NDIR Procedure) should be sufficient.

If you have any questions, please contact me.

Enc.

cc: T. Germino, DAG (w/enc)
H. Steinberg, I-280 Field (w/enc)
F. Cimionetti, NJDOT-Newark (w/enc)

932520407

STATE OF NEW JERSEY
HACKENSACK MEADOWLANDS DEVELOPMENT COMMISSION
1099 WALL STREET WEST • LYNDHURST, N. J. 07071

Date

FROM THE DESK OF JOHN T. BOLAN

TO

ULRICH STEINBERG, RESIDENT ENGINEER
NEW JERSEY DEPARTMENT OF TRANSPORTATION
FIELD OFFICE
1200 HARRISON AVE.
KEARNY, NJ 07032

FRANK CIMONETTI
NEW JERSEY DEPARTMENT OF TRANSPORTATION
REGION II HEADQUARTERS
INTERSECTION ROUTES 1, 9, 21 AND 22
NEWARK, NJ 07114

932520409

MEMO

(51)

TO Diamond Head Oil file through Steve Carfora SC
FROM D. Dawson JD DATE 6/2/82
SUBJECT Telephone conversation with Eastern Chemical Cleaning.

On 6/2/82 at 2:30 PM, I spoke with Laurie from Eastern Chemical Cleaning Co. I asked her to send me a copy of the manifest used to ship the remaining 70 drums from Newtown Refining, Kearny on 5/25/82; she said she would do so (it is PA A3284702). I also asked her to send me a copy of the analysis run on the material, and again, she agreed to do so.

I asked her when the first shipment of 77 drums went to Chemical Waste Management (CWM); she said that all 147 drums are still in the Resource Technology Services (RTS) warehouse in Conshahocken, PA, due to varying results in analysis performed by Eastern and RTS. If RTS results are indeed correct, the material will not be accepted by CWM (the PCB level may be over 500 ppm)?

cc: Sue Savoca

932520410

105

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Diamond Head Oil file through Steve Carfora SC

FROM D. Dawson DATE 6/9/82

SUBJECT Phone conversation with Walt Witt, Eastern Chemical Cleaning on 6/9/82

At 11:45 a.m., Walt Witt returned my call. He told me the 147 drums left the Resource Technology Services (RTS) warehouse in Conshohocken, PA on Monday, 6/7/82 in 2 box trailers. ~~They are presently being stored on the Chemical Waste Management (CWM) property since their analysis shows higher levels of PCB's (3300 ppm) than the analysis done by Eastern (206 ppm); CWM will not landfill it if the PCB level is higher than 500 ppm.~~ Mr. Witt said the material will probably be incinerated on the Vulcanus, but the decision to do so lies with Newtown Refining, the generator. He suggested I call Mr. Gutfeld at Newtown for the final destination of the material; Mr. Witt said I should also get copies of the analyses and the manifest #'s and dates from Mr. Gutfeld since he is the generator.

I asked Mr. Witt what the 16 empty drums I observed on 6/3/82 were for and he said that Eastern removed those drums to another job. He said Eastern was hired to take the oil out of the tanks, which was accomplished.

Mr. Witt said my questions as far as the clean up of the oil in the base of tank 2, the oil stained soil and debris, the piles of oily sludge, and the lagoon should be taken up with Mr. Gutfeld. I recommend sampling the soil in the tank 2 area for PCB-contamination, too!

Mr. Witt told me the tanks were removed by Mazza, but he did not know their location.

I also asked Mr. Witt if Heyrich's vector had been cleaned out with diesel fuel and he said yes.

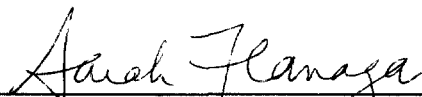
cc: Sue Savoca

932520411

***Diamond Alkali Co.
Passaic River Site***

NJD980528996

THIS DOCUMENT "***Correspondence to Barbara Greer, from Susan Savoca, November 1, 1982***" IS
CURRENTLY CLASSIFIED
NON- CONFIDENTIAL BY EPA.



Sarah Flanagan
Office of Regional Council

6/16/2006

Date

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Barbara Greer
FROM Susan Savoca DATE November 1, 1982
SUBJECT Diamond Head Oil Refining

CONFIDENTIAL

Due to my involvement with the Quanta Resources Corporation case, I have had occasion to review information concerning the above-referenced matter. The following is a summary, by source, of this information and recommendations regarding the site.

SUMMARYFrom Diamond Head Files

From in-house files, it is known that Ag-Met Oil Service, Inc. (a New York corporation) filed an Application for Certificate of Authority with the New Jersey Department of State on October 8, 1976. This document indicates that the company was incorporated in New York on September 27, 1976 and that its corporate office was located at 37-80 Review Avenue, Long Island City, New York. (Note that this is the same address as Quanta's Long Island City site which, due to the abandonment by Quanta's trustee, is now undergoing a cleanup operation by NYC.) Its stated business in New Jersey was for the collecting, refining and recycling of liquid oily waste into fuel oil and lube oil. On November 18, 1976, the name was changed to Newtown Refining Corporation and the address for the corporate headquarters was changed to Landmark Tower, One Landmark Square, Suite 303, Stamford, Connecticut. The New Jersey corporate No. was 0100-0270-66.

On June 7 or 8, 1978, the Department received a "Special Waste Facility Application for Temporary One Year Registration" to operate a waste oil reprocess system. The "applicant" was listed as Newtown Refining Corporation and the "company" was listed as Diamond Head Oil Refining Division. The application indicated that the New Jersey corporate number was the same as for Newtown Refining Corporation. The facility's name was listed as Diamond Head Oil Refining. The "Person to Have Prime Administrative Authority" was listed as Russell Mahler. Lloyd Mahler signed the application as Vice President. On July 15, 1978, Diamond Head Oil Refining Division, 1401 Harrison Turnpike, Kearny, New Jersey (Block 285, Lot 3, Hudson County) was issued a TOA (Facility No. 6907B) as a waste oil reprocessor. The expiration date of the TOA was April 30, 1979 and it was conditional on the submission of an engineering design by November 1978.

From the early inspection reports (11/28/78, 2/6/79, 4/12/79), it appears that the site ceased operating in early 1979, possibly due to litigation involving New Jersey Department of Transportation (see discussion infra). There were two underground storage tanks containing an oily substance. These early inspection reports noted oil spills throughout the property. On April 12, 1979, the inspector was informed that "material is being sent to Edgewater."

932520412

(Note that, during this time, Edgewater Terminals were in operation in Edgewater.)

On March 19, 1980, a site inspection revealed that the location appeared to be used for illegal dumping of waste oils, although there was no indication that the site was operating as a facility. The inspector was told that Modern Transportation had been contracted (by EPA?) to clean up the site, but that clean up had not yet commenced. (Note that Modern's waste oil TOA expired on April 30, 1979.)

On April 4, 1980, an inspector was told that the standing oil was periodically vacuumed up by Modern Transportation.

On May 19, 1982, the Bureau of Hazardous Waste received a telephone complaint from John Sarnas of the Kearny Health Department. Mr. Sarnas observed trucks pumping liquid from storage tanks into drums. This resulted in inspections on May 20, 1982, May 21, 1982, May 24, 1982, June 3, 1982, June 15, 1982, and August 13, 1982. The inspectors learned that Newtown Refining Corporation is now a wholly-owned subsidiary of Refinement International Company, 162 Main Street, Woonsocket, Rhode Island. Steven Gutfeld of Refinement stated that Refinement had purchased the site from a company who had bought it from Russell Mahler. Refinement hired Eastern Chemical Cleaning Co., 100 Plaza Center, Secaucus, New Jersey to clean up the site. As part of the clean up, the two underground tanks were analyzed: one of them contained oil and water with less than 50 ppm PCB's and the other had 206 PCB's, according to Eastern. (Although requested, neither Eastern nor Refinement have submitted the analyses to DEP.) About 7,500 gallons of material was pumped out and placed in 147 drums. The drums were to be hauled by Resource Technology Services, 6 Berkeley Road, Devon, PA to the Chemical Waste Management's Landfill in Emelle, Alabama by truck in two shipments. From there, it was allegedly planned to be incinerated on CWM's ship, the Vulcanus. Not all manifests reflecting these transfers have been received. In addition, the inspection reports indicate that there is oil-contaminated soil on this site that needs to be cleaned up. Although the inspector was informed of Refinement's intent to clean it up, it does not appear to have been done. EP Toxicity analysis of a soil sample indicated 32 ppm lead, which exceeds the 5 ppm limit.

From Kearny

On October 29, 1982, I telephoned the Kearny Tax Assessors Office (201-991-2700) to request ownership information on Block 285, Lot 3 (site of Diamond Head).

According to their records, Diamond Head Oil Refining Company, Inc. sold the site to PSC Resources, Inc., a Delaware Corporation, successor to Phillips Resources, Inc. on November 1, 1973. On November 3, 1976, the site was purchased by Ag-Met Oil Service, Newtown Refining Corporation. There was no record of an owner prior to Diamond Head, nor of an owner subsequent to Ag-Met-Newtown.

Firm that created oil spill awarded

(Continued from Page One)

land City and Syracuse.

However, Newtown was only one company in an interlocking network of companies controlled by Russell Mahler out of an office in Edgewater. The various companies, which include the defunct Quanta Oil and Hudson Oil companies, operated primarily in New Jersey, New York, Pennsylvania and Massachusetts, and reached as far north as Canada.

According to Carracino, Mansfield and Thomas Humiston, who was a Newtown vice president in charge of the Kearny cleanup, most of the waste was supposed to be taken to Newtown plants in New York and Massachusetts.

"Some of it went to Long Island City; some of it went into landfills, and some of it went down sewers," Mansfield testified.

Mansfield recently pleaded guilty to dumping charges in Pennsylvania through the same operation and will be sentenced May 17. He is also under indictment in New Jersey and New York and has agreed to cooperate with authorities in both states.

While the Select Committee on Crime was primarily concerned with dumping in five New York City landfills, leaving a cleanup cost of many hundreds of millions of dollars, it also heard testimony of other contracts awarded to Newtown for cleaning up its own toxic waste lagoons.

John Cassiliano, former supervisor of landfills for the New York City Department of Sanitation, took the Fifth Amendment on almost every question. Cassiliano was fired in March, after 28 years with that department, after he took payoffs to allow toxic dumping in the landfills. He is under a state indictment and is a central figure in a federal investigation in New York.

Considerable testimony was heard with regard to the New Jersey cleanup contract since most of the waste accumulated at the Kearny site for almost 40 years was illegally dumped in New York, according to the witnesses.

Mansfield testified that he believes much of the oil at the site, which was on Harrison Avenue where Route 280 connects with the New Jersey Turnpike, contained cancer-causing PCBs.

He said that the huge lake was spread over some eight acres and belonged to the defunct Diamond Head Oil Co., a waste oil refinery. "Diamond Head was owned by Russell Mahler and Agmet," Mansfield said, referring to still another corporation in the operation.

Upon questioning from New York State Sen. Ralph J. Marino, chairman of the Select Committee on Crime, Mansfield explained that Newtown, which got the contract, also was owned by Mahler.

"So, New Jersey paid them to clean up oil and hazardous waste on their own property, is that right?" asked committee general counsel Jeremiah B. McKenna.

"That's correct," Mansfield said. He said that such arrangements have been common in New Jersey and New York, although he added that it is becoming more difficult because of the increased attention being focused on the toxic dumping problem.

"There are two kinds of companies in the toxic waste business," Mansfield testified. "There's the cleanup contractors and the disposal facilities. The cleanup contractors were more involved in doing the illegal dumping, often hired to clean up the same stuff they dumped," he explained.

The companies owned by Mahler, for which Mansfield served as a truck driver, plant manager and dispatcher for seven years, were largely involved in both kinds of practices.

Mahler was sentenced to one year in prison and fined \$760,000 in Pennsyl-

vania last month for pleading guilty to dumping millions of gallons of toxic waste in a mine shaft that led into the Susquehanna River.

Humiston said he was in charge of loading the trucks that took the waste away from the Kearny site but said he did not know it was being illegally disposed. He is the president of an oil service company in Syracuse.

"It took us four months to clean up the site. We took away anywhere from 10 to 50 truckloads a day," Humiston said, adding that to his knowledge New Jersey officials were supposed to have tested the toxicity of the materials. Asked where he thought the waste went, Humiston said:

"I thought a lot of it ended up being sold."

His reference was to the fact that large quantities of waste oil are being blended with toxic waste and sold as heating fuel, especially to large apartment complexes.

Carracino testified that he bid for the contract as a subcontractor to S.J. Groves Construction of Woodbridge. "S.J. Groves told us the lake consisted of oil, heavy metals with hazardous waste that included copper, zinc and others," Carracino said.

"We bid \$1.8 million to do the job," Carracino said, explaining this was on the basis of an estimated 8 million gallons. However, Humiston said there were approximately 13 million gallons removed, and Carracino said later on that basis his bid provisions would have increased the price to \$2.2 million.

The Newtown Co. was eventually paid \$5 million for the cleanup.

Prior to the bids being announced, Anthony Rizzo told me Crescent Construction had the contract and that if I wanted the subcontract, I would have to do business with him, and that meant kicking back two cents for every gallon," Carracino explained.

Rizzo is the owner of Anthony Rizzo Carting, originally from Westchester County and now operating in Passaic and Bergen counties. Both Rizzo and his company are among the 58 defendants awaiting trial on charges of participating in a wide conspiracy to control the garbage industry and eliminate competition in nine North Jersey counties.

The trial, which has been postponed several times since the indictments in October 1980, is now scheduled for next September.

"I was told we lost the contract by a paltry amount," Carracino testified. "That was after I got two telephone calls and one visit in person to my office in Elizabeth, from Rizzo," he said.

"He told me that some people wanted to give me the job and I'd have to meet with them at the Crow's Nest, a restaurant in Hackensack," Carracino testified, adding:

"I didn't go. I told Rizzo my bid was only through S.J. Groves. I called Roger Ludlow of Groves and told him about Rizzo and the kickback, and he said he couldn't believe it."

Carracino said he also called Robert Winter, deputy attorney general in the state Division of Criminal Justice, to tell him.

Winter told me to meet him at the Rusty Nail Restaurant in New Brunswick the next day. About four hours later I got a phone call from someone who told me not to meet with Winter the next day," Carracino testified.

Asked if he took that as a warning, he said he did. "I don't know who the caller was, but I don't think it came from Winter's office," he added.

When asked who the two cents a gallon kickback was to go to, Carracino said he was told it was just to go to "some people."

He also testified that Diamond

Head had a pipe that stretched across Harrison Avenue, opposite the MSL sanitary landfill. "In the cleanup the just pumped a lot of the waste across the street into another site. Afterward, there was a toxic lake on the other side of the street, after Newtown got paid."

Mansfield was asked about the pipe after his testimony and stated:

"I don't know of a pipe across the road but Diamond Head had all kinds of pipes and hoses leading into the surrounding waterways."

The cleanup site is surrounded by wetlands and marshes. At the time of t



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State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Acting Director

2 Babcock Place

West Orange, N.J. 07052

201 - 669 - 3960

mailed 3/16/88

March 15, 1988

Jeryl Maglio
Hudson Meadows Urban
Development Corp.
525 Riverside Ave.
Lyndhurst, N.J.

Dear Ms. Maglio:

Pursuant to our telephone conversation of 18 February 1988, I would like to outline potential problems which may exist in regard to development of the former Diamond Head Oil Refinery site on Harrison Ave. (Rt. 508), Kearny. Recently the Departments' Bureau of Planning and Assessment referred this case to our office based on their inspection and preliminary assessment which showed excessive levels of a number of soil contaminants, as we discussed over the phone. NJDEP believes that remediation needs to be done at the Diamond Head site, and has been attempting to locate a former owner and operator, Russell Mahler, as Responsible Party. Unfortunately we have had no success thus far in finding Mr. Mahler.

Based on our files it appears that improper disposal practices and sloppy waste management at Diamond Head resulted in chronic discharges of volatile organics, toxic metals and petroleum hydrocarbons. Planning and Assessment's site survey indicates significant soil contamination, and groundwater may be impacted as well. Of additional concern is the possibility of PCB's in soil, as Mr. Mahler was alleged to have dealt in PCB-tainted oil. The Department will, if possible, issue Mr. Mahler an order requiring site cleanup, and will seek Responsible Party search help from appropriate agencies.

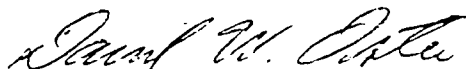
932520415

Jeryl Maglio
Page 2

If Mr. Mahler cannot be located NJDEP will take alternate measures to ensure that proper remediation is done before development of the site proceeds. I suggest that it would be in the interest of Hudson Meadows to undertake a clean-up investigation for the Diamond Head site, (if this has not already been done) and to consider implementing the necessary remediation procedures. This office would be happy to review and comment on any such plans. As the site history, environmental assessments and actions of this office are all matters of public record, site remediation by Hudson Meadows might preclude the possibility of future legal problems with regulatory agencies, buyers or tenants.

If you have any questions, or require further information, please contact me at 669-3981.

Sincerely,



David W. Oster
Environmental Specialist

DWO/gr

932520416

**MacArthur Petroleum & Solvent
Company/W.A.S. Terminals Corporation**

Newark Fire Department

Hazardous Materials Office
188 Mulberry Street
Newark, New Jersey 07102

Stanley J. Kossup
Director

Phone (201) 733-7506

Fax (201) 733-7468

To: W.A.S. Terminals
MacArthur Fuel
126 Passaic Street

Date: May 17, 1991

From: Batt. Chief Anthony L. Apostolico

Re: Reinspection 126 Passaic Street

Sir,

On May 7, 1991 Batt. Chief Anthony L. Apostolico, of the Office of Hazardous Materials along with Chief Anstis and Chief Ladd of the Bureau of Life Safety reinspected your facility at 126 Passaic Street.

Great improvements were noted as to the condition of the storage areas as well as to the segregation of chemicals.

Following are conditions that still exist:

1. It was noted that tank h-11 still does not have a dike around it and the ground is not protected.

SECTION 7.4 It shall be unlawful to install, use or maintain any aboveground storage container making contact with the ground unless and until that exterior surface in contact with the ground is protected in accordance with sound engineering design and the compliance schedule contained herein.

TIME: It was stated that this tank will be moved by the end of May.

2. Tanks # 2,3,211, and 212 diked area not sufficient to hold the contents of the largest tank (211).

932520419

3. Tanks # 4 and 8 have no labels.

SECTION 14.1 All storage areas, tanks, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA AND DEP regulations. Whenever possible posting and/or labeling shall provide information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

TIME: 15 DAYS

4. Pipe lines running along the river are not labeled:

SECTION 14.1 All storage areas, tanks, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA and NJDEP regulations. Whenever possible posting and/or labeling shall provide information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

Time: 15 days.

5. Tank area containing approx. 22 tanks must have a dike.

6. Area where MEK is stored # 38 not sufficiently marked, also not diked to hold the contents of largest tank.

Section 14.1 All storage areas, tanks, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA and NJDEP regulations. Whenever possible posting and/or labeling shall provide information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

932520420

Time: 15 days.

7. Drums along the river not properly segregated: ie corrosives from flammables.

SECTION 10.1 B It shall be unlawful to use or operate any bulk storage area or part thereof without:
Providing for the segregation of potentially reactive chemicals which are hazardous materials or which any react so as to form hazardous materials, and which reaction may present or cause a hazardous or dangerous condition.

Time: 15 days.

8. ~~Tanks # H 1, 2, 3, and 4 a current lab report stating the % of PCB's in the transformer oil you received from con-ed.~~

9. Tank # W 30, and W 31 have o markings.

Section 14.1 All storage areas, tank, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA and NJDEP regulations. Whenever possible posting and/or labeled shall provide information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

Time: 15 days.

10. Drums in the basement, many were with-out labels.

Section 14.1 All storage areas, tanks, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA and NJDEP regulations. Whenever possible posting and/or labeling shall provide information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

Time: 15 days.

932520421

11. It was noted that on the 4th floor in the rear left corner there were Bays of Tetrasodium Phrophosphate and Ammonium Hydrogen Floride etc. Many of the bays were broken, there by spilling there contents onto the floor or on top of other bays.

Section 15.2 Any person, fire or corporation responsible for storing the hazardous materials shall institute and complete all actions required to contain and legally dispose of a discharge whether said discharge was sudden or gradual.

Time: 30 days.

12. It was also noted that many drums are not labeled.

Section 14.1 All storage areas, tanks, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA and NJDEP regulations. Whenever possible posting and/or labeled shall provide information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

Time: 45 days.

13. On the 5th floor bays of Sodium Nitrate are mixed with ammonium Sulfate etc. And are not segregated. These bays are also broken and spilling there contents on to the floor on other products.

Section 10.1 B It shall be unlawful to use or operate any bulk storage area or part thereof without:
Providing for the segregation of potentially reactive chemicals which are hazardous materials or which may react so as to form hazardous materials, and which reaction may present or cause a hazardous or dangerous condition.

Time: 30 days.

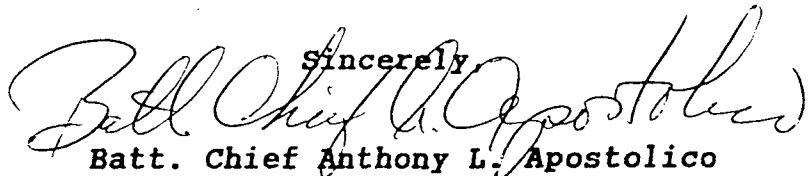
Section 14.1 All storage areas, tanks, portable containers, and pipelines containing hazardous materials shall be posted and/or labeled in accordance with NFPA, OSHA and regulations. Whenever possible posting and/or labeled shall provide information necessary to protect the public and assist emergency re

sponse personnel in carrying out their responsibilities. Underground tanks shall be marked on the fill or vent pipe. Drums and other container storage areas shall be clearly marked in such a manner as to readily identify the hazardous materials stored therein.

Time: 30 days.

Section 20.2 Whenever in these Regulations any act is prohibited or is made or declared to be unlawful, or whenever in these Regulations the performance of any act is required or the failure to perform any act is made or declared to be unlawful, the commission of any such prohibited act or the failure to perform any such required act, shall be punished by a fine of not more than \$1000.00 per day violation or by imprisonment for term of not more 90 days, or by any combination of such fine and imprisonment. Each day any violation of these Regulations continues shall be considered a separate offense.

Sincerely,


Batt. Chief Anthony L. Apostolico



State of New Jersey
Department of Environmental Protection and Energy
Division of Enforcement Field Operations
Metro Bureau of Water and Hazardous Waste Enforcement
2 Babcock Place
West Orange, NJ 07052-5504
Tel. # 201-669-3900
Fax. # 201-669-3907

Jeanne M. Fox
Acting Commissioner

James K. Hamilton
Assistant Director

October 29, 1993

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Irving Berkowitz, President
East 11th. Street Fuels
4 Livingston Road
Scarsdale, NY 10583

Re: Waste Oil in Leased Tank at W.A.S. Terminals (Newark).


Dear Mr. Berkowitz:

The Department has determined that tank No. 15-2 was leased from W.A.S. Terminals by your company and that while the tank was under your control, listed hazardous waste oils were placed into the tank. Some of the listed waste oils which were placed into the tank include NJ listed waste codes X721, X722, X724 and X726. The Department also understands that there are over 300,000 gallons of waste oil mixture in the above referenced storage tank.

Please be advised that the entire mixture of oil in the subject tank is a hazardous waste (mixture rule) and must be managed in full compliance with NJAC 7:26-1.1 et. seq. Consequently, the waste may only be moved off-site in full compliance with the New Jersey hazardous waste regulations, i.e., via the use of hazardous waste manifests, licensed hazardous waste haulers, and be shipped to facilities authorized to handle the waste oils discussed above. Disposition of the waste oil must also be in full compliance with the federal used oil standards at 40 CFR 279. Be also advised that the storage of the subject waste oil on-site for greater than 90 days without a storage permit from the Department is prohibited.

If you have any questions about this letter, please call me at
(201) 669-3900.

Very truly yours,



Jeffrey A. Sterling
Acting Section Chief
Metro Bureau of Water &
Hazardous Waste Enforcement

jas

cc: Jim Hamilton, Asst. Director
Peter T. Lynch, MFO
Norine Binder, BAM
Marylyn Greenberg, Esq.
Phil George, WAS Terminal (via certified mail)
File

932520425

SAYBOLT INC.



HILADELPHIA LAB OFFICE

CUSTOMER
REF. NO(S) :

DATE : 06/10/93

LABORATORY NO. : 93-01682

INVOICE NO.:ER-2397A

DESCRIPTION	ANALYSIS		
Sample designated as : FUEL OIL			
Identifying Marks : T TK 15-2 MWH-052793-0918-03-2 (05/27/93)			
Submitted by : NJ DEPT CRIMINAL JUSTICE			
Client : NJ DEPT CRIMINAL JUSTICE			
NOTES			
- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of SAYBOLT INC.			
- Results were based on analysis made at the time samples were received at the laboratory.			
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.			
- Sample nomenclature is designated by the customer.			
	TEST	METHOD	RESULT
	GRAVITY, API AT 60 F	D-1298	28.2
	FLASH PT., PENSKY MARTENS, DEG F	D-93	120
	POUR POINT, DEG C/DEG F	D-97	-33 / -27
	SULFUR, X-RAY, WT PCT	D-4294	0.59
	ASH, WT PCT	D-482	0.55
	VISCOSITY, KIN CST AT 100 F	D-445	31.77
	VISCOSITY, SSU SEC AT 100 F	D-2161	149.4
	TOTAL HALOGENS, PPM	QUANTI CHLOR	756
	WATER & SEDIMENT (BS&W), VOL PCT	D-1796	1.50
	B.T.U. VALUE (GROSS), BTU/LB	D-240	18914
	B.T.U. VALUE (GROSS), BTU/GAL	D-240	139557
	WATER BY DISTILLATION, VOL PCT	D-95	1.0
	MEMBERS ASTM-API-SAE		

MEMBERS ASTM-API-SAE

[Signature]
SAYBOLT INC.

932520426

Report is issued solely for the use of our customers and supplies only when they specifically requested. There may be other relevant information which has not been reported. Saybolt will not be responsible to the contents of this report or for any omission therefrom.

SAYBOLT INC.



SAYBOLT

CUSTOMER
REF. NO(S) :

LABORATORY NO. : 93-01682

INVOICE NO.: ER-2397A

HILADELPHIA LAB OFFICE

DATE : 06/10/93

DESCRIPTION

Sample designated as :
FUEL OIL

Identifying Marks :

T TK 15-2
MWH-052793-0918-03-2
(05/27/93)

Submitted by :

NJ DEPT CRIMINAL JUSTICE

Client :

NJ DEPT CRIMINAL JUSTICE

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of SAYBOLT INC.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

ANALYSIS

TEST	METHOD	RESULT
LEAD, PPM	SOL/DIL	80
CHROMIUM, PPM	SOL/DIL	4
ARSENIC, PPM	SOL/DIL	< 1
CADMIUM, PPM	SOL/DIL	1

MEMBERS ASTM-API-SAE

Report is issued solely for the use of our customers and supplies only when they specifically requested. There may be other relevant information which has not been reported. Saybolt will not be responsible to the customer for the contents of this report or for any omission therefrom.


SAYBOLT INC.

932520427

SAYBOLT INC.



SAYBOLT

HILADELPHIA LAB OFFICE

CUSTOMER
REF. NO(S) :

DATE : 06/10/93

LABORATORY ANALYSIS REPORT

LABORATORY NO. : 93-01681

INVOICE NO.:ER-2397A

DESCRIPTION

Sample designated as :
FUEL OIL

Identifying Marks :

M TK 15-2
MWH-052793-0901-02-2
(05/27/93)

Submitted by :

NJ DEPT CRIMINAL JUSTICE

Client :

NJ DEPT CRIMINAL JUSTICE

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of SAYBOLT INC.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

ANALYSIS

TEST

GRAVITY, API AT 60 F
FLASH PT., PENSKY MARTENS, DEG F
POUR POINT, DEG C/DEG F
SULFUR, X-RAY, WT PCT
ASH, WT PCT
VISCOSITY, KIN CST AT 100 F
VISCOSITY, SSU SEC AT 100 F
TOTAL HALOGENS, PPM
WATER & SEDIMENT (BS&W), VOL PCT
B.T.U. VALUE (GROSS), BTU/LB
B.T.U. VALUE (GROSS), BTU/GAL
WATER BY DISTILLATION, VOL PCT

METHOD

D-1298
D-93
D-97
D-4294
D-482
D-445
D-2161
QUANTI CHLOR
D-1796
D-240
D-240
D-95

RESULT

28.2
122
-33 / -27
0.59
0.72
31.58
148.6
908
2.0
18794
138672
1.4

MEMBERS ASTM-API-SAE

SAYBOLT INC.

932520428

Report is issued solely for the use of our customers and supplies only on they specifically requested. There may be other relevant which has not been reported. Saybolt will not be responsible to for the contents of this report or for any omission therefrom.

SAYBOLT INC.



SAYBOLT

PHILADELPHIA LAB OFFICE

CUSTOMER
REF. NO(S) :

DATE : 06/10/93

LABORATORY ANALYSIS REPORT

LABORATORY NO. : 93-01681

INVOICE NO.:ER-2397A

DESCRIPTION

Sample designated as :
FUEL OIL

Identifying Marks :

M TK 15-2
MWH-052793-0901-02-2
(05/27/93)

Submitted by :

NJ DEPT CRIMINAL JUSTICE

Client :

NJ DEPT CRIMINAL JUSTICE

ANALYSIS

TEST

LEAD, PPM
CHROMIUM, PPM
ARSENIC, PPM
CADMIUM, PPM

METHOD

SOL/DIL
SOL/DIL
SOL/DIL
SOL/DIL

RESULT

92
5
< 1
2

NOTES

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MEMBERS ASTM-API-SAE

932520429

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[Handwritten signature]

SAYBOLT INC.



SAYBOLT

HILADELPHIA LAB OFFICE

CUSTOMER
REF. NO(S) :

DATE : 06/10/93

LABORATORY ANALYSIS REPORT

LABORATORY NO. : 93-01680

INVOICE NO.:ER-2397A

DESCRIPTION

Sample designated as :
FUEL OIL

Identifying Marks :

B TK 15-2
MWH-052793-0840-01-2
(05/27/93)

Submitted by :

NJ DEPT CRIMINAL JUSTICE

Client :

NJ DEPT CRIMINAL JUSTICE

NOTES

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- Sample nomenclature is designated by the customer.

ANALYSIS

TEST

GRAVITY, API AT 60 F
FLASH PT., PENSKY MARTENS, DEG F
POUR POINT, DEG C/DEG F
SULFUR, X-RAY, WT PCT
ASH, WT PCT
VISCOSITY, KIN CST AT 100 F
VISCOSITY, SSU SEC AT 100 F
TOTAL HALOGENS, PPM
WATER & SEDIMENT (BS&W), VOL PCT
B.T.U. VALUE (GROSS), BTU/LB
B.T.U. VALUE (GROSS), BTU/GAL
WATER BY DISTILLATION, VOL PCT

METHOD

D-1298
D-93
D-97
D-4294
D-482
D-445
D-2161
QUANTI CHLOR
D-1796
D-240
D-240
D-95

RESULT

28.5
120
-33 / -27
0.59
0.73
30.40
143.3
887
18.0
16518
121649
9.0

MEMBERS ASTM-API-SAE

932520430

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Handwritten signature: B.B.

SAYBOLT INC.



SAYBOLT

PHILADELPHIA LAB OFFICE

CUSTOMER
REF. NO(S) :

DATE : 06/10/93

LABORATORY ANALYSIS REPORT

LABORATORY NO. : 93-01680

INVOICE NO.:ER-2397A

DESCRIPTION

Sample designated as :
FUEL OIL

Identifying Marks :

B T6 15-2
MWH-052793-0840-01-2
(05/27/93)

Submitted by :

NJ DEPT CRIMINAL JUSTICE

Client :

NJ DEPT CRIMINAL JUSTICE

ANALYSIS

TEST

LEAD, PPM
CHROMIUM, PPM
ARSENIC, PPM
CADMIUM, PPM

METHOD

SOL/DIL
SOL/DIL
SOL/DIL
SOL/DIL

RESULT

95
5
1
3

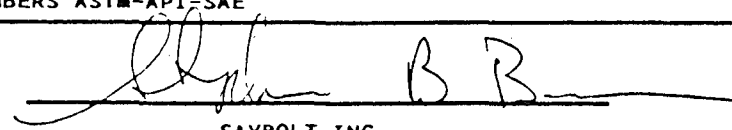
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- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

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SAYBOLT INC.



ATLANTIC
Petroleum Services, Inc.

Inspections of Quality

P.O. Box 317
Phone (718) 720-8700

Mariner's Harbor
Fax (718) 720-1405

New York, 10303-0001
Telex: 141032 / ATPETROL

C E R T I F I C A T E O F A N A L Y S I S

SAMPLE TANK : No. 15-2
LOCATION AT : W.A.S. TERMINAL, NEWARK, NEW JERSEY
PRODUCT : CUTTER STOCK
DATE : 8/27/93
A.P.S. FILE No. : 23250

On samples drawn from upper, middle and lower of shore tank 15-2, the following Analytical results were obtained:

METHOD No. TESTS: R E S U L T S

D-287	API @ 60 F.	27.1	
D-93	FLASH POINT, F.	114	
D-4294	SULFUR % WT.	.400	
D-97	POUR POINT, F.	BELOW 0	
D-445	VISCOSITY SSU @ 100 F.	159.9	
D-96	S & W PCT. WT.	11.0	
D-473	SEDIMENT BY EXTRACTION	.62	
D-95	WATER BY DISTILLATION		
	COMPOSITE	9.6	
	UPPER	1.2	
	MIDDLE	1.4	
	LOWER	25.2	
D-482	ASH		
	COMPOSITE	.80	
	UPPER	.46	
	MIDDLE	.49	
	LOWER	1.41	
EPA-9077	HALOGENS	1000	ppm
EPA-9076	TOTAL HALOGENS	1300	ppm
EPA 6010	ARSENIC	N/D	ppm
	CADMIUM	1.22	ppm
	CHROMIUM	6.32	ppm
	LEAD	82.8	ppm

EPA 600/4-81-045 PCB's

~~AROCLOR 1260 11 ppm~~

ATLANTIC PETROLEUM SERVICES, INC.

For
JAMES EGAN
Laboratory Director

Description of the sample material tested is as indicated by our client. This certificate covers only those chemical components and physical properties for which tests were requested. No liability is assumed for anything not tested and reported.

United States Customs Approved

932520432



ATLANTIC
Petroleum Services, Inc.

Inspections of Quality

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Phone (718) 720-8700

Mariner's Harbor
Fax (718) 720-1405

New York, 10303-0001
Telex: 141032 / ATPETROL

C E R T I F I C A T E O F A N A L Y S I S

SAMPLE TANK : No. 15-2
LOCATION AT : W.A.S. TERMINAL, NEWARK, NEW JERSEY
PRODUCT : CUTTER STOCK
DATE : 8/27/93
A.P.S. FILE No. : 23250
-PAGE 2-

EPA 8010

R E S U L T S

ALLYL CHLORIDE	ND	ppm
BROMODICHLOROMETHANE	ND	ppm
BROMOFORM	ND	ppm
BROMOMETHANE	ND	ppm
CARBON TETRACHLORIDE	ND	ppm
CHLOROBENZENE	ND	ppm
CHLOROETHANE	ND	ppm
CHLOROFORM	ND	ppm
CHLOROMETHANE	ND	ppm
DIBROMOCHLOROMETHANE	ND	ppm
1,2-DIBROMO-3-CHLOROPROPENE	ND	ppm
1,2-DIBROMOETHANE	ND	ppm
DIBROMOMETHANE	ND	ppm
1,2-DICHLOROBENZENE	11.37	ppm
1,3-DICHLOROBENZENE	ND	ppm
1,4-DICHLOROBENZENE	2.22	ppm
TRANS-1,4-DICHLORO-2-BUTENE	ND	ppm
DICHLORODIFLUOROMETHANE	ND	ppm
1,1-DICHLOROETHENE	ND	ppm
1,2-DICHLOROETHENE	ND	ppm
1,1-DICHLOROETHENE	3.10	ppm

ATLANTIC PETROLEUM SERVICES, INC.

For

JAMES EGAN
Laboratory Director

Description of the sample material tested is as indicated by our client. This certificate covers only those chemical components and physical properties for which tests were requested. No liability is assumed for anything not tested and reported.

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Petroleum Services, Inc.

Inspections of Quality

P.O. Box 317
Phone (718) 720-8700

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New York, 10303-0001
Telex: 141032 / ATPETROL

C E R T I F I C A T E O F A N A L Y S I S

SAMPLE TANK : No. 15-2
LOCATION AT : W.A.S. TERMINAL, NEWARK, NEW JERSEY
PRODUCT : CUTTER STOCK
DATE : 8/27/93
A.P.S. FILE No. : 23250
-PAGE 3-

EPA 8010 R E S U L T S

Continued:

TRANS-1,2-DICHLOROETHENE	ND	ppm
1,2-DICHLOROPROPANE	ND	ppm
CIS-1,3-DICHLOROPROPENE	ND	ppm
TRANS-1,3-DICHLOROPROPENE	ND	ppm
METHYLENE CHLORIDE	44.9	ppm
1,1,1,2-TETRACHLOROETHANE	ND	ppm
1,1,2,2-TETRACHLOROETHANE	ND	ppm
TETRACHLOROETHENE	341	ppm
1,1,1-TRICHLOROETHANE	283	ppm
1,1,2-TRICHLOROETHANE	ND	ppm
TRICHLOROETHANE	9.30	ppm
TRICHLOROFLUOROMETHANE	40.2	ppm
1,2,3-TRICHLOROPROPANE	ND	ppm
VINYL CHLORIDE	ND	ppm

NOTE:

ND = not detected

EPA 8010 / EPA 600/4-81-045 Detection limits 1.0 ppm

ATLANTIC PETROLEUM SERVICES, INC.

For
JAMES EGAN
Laboratory Director

Description of the sample material tested is as indicated by our client. This certificate covers only those chemical components and physical properties for which tests were requested. No liability is assumed for anything not tested and reported.

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932520434

Tenneco Oil company

932520436

TENNECO OIL COMPANY
HARRISON, NEW JERSEY

REPORT OF ANALYTICAL RESULTS FOR
THE ENVIRONMENTAL CLEANUP
RESPONSIBILITY ACT (ECRA)

OCTOBER 21, 1985



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • P.O. Box 7809 • Edison, New Jersey 08818 • (201) 225-2000

INTRODUCTION

The following report is a discussion of the results of analysis performed from samples collected from environmentally strategic locations at the Tenneco Oil Company facility in Harrison, New Jersey. This report serves as a follow-up to the Site Evaluation Submission for the Environmental Cleanup Responsibility Act (ECRA).

DISCUSSION OF RESULTS OF ANALYSIS

Diked Tank Containment Area

Five (5) soil samples were collected from the tank farm within the diked containment area of the facility. Samples A1-A5, 0-12" increments were analyzed for petroleum hydrocarbons and lead. Samples A1-A4, 18-24" increments were analyzed for priority pollutant volatile organic compounds. The 18-24" increment of Sample A5 was analyzed for all USEPA priority pollutants. Petroleum hydrocarbon and lead concentrations were in excess of NJDEP Interim Standards at each location from the 0-12" increment. Copper and lead concentrations were in excess of current standards at the 18-24" increment of location A5. Table 1 provides a summary of significant analytical results by identification number. Figure 1 provides significant analytical results in relation to geographical sample location.

Tank E - #2 Fuel Oil Tank (Within Diked Area)

Two (2) soil samples were collected from the north and south ends respectively, of the fuel oil tank within the diked area of the facility. Analysis for petroleum hydrocarbons was performed on the 0-6" increment at each sample. Concentrations of petroleum hydrocarbons were in excess of NJDEP Interim Standards at each. Table 1 provides a summary of significant analytical results by identification number. Figure 2 provides significant analytical results in relation to geographical sample location.

Bay Truck Loading Rack

Six (6) soil samples were collected from the area beneath the truck loading dock of the facility adjacent to Harrison Street. Two samples were analyzed for petroleum hydrocarbons and lead. A composite of the 0-6" increment from samples C1-C3 provide one sample for analysis. A composite of the 0-6" increment from samples C4-C6 provided another sample for analysis. Concentrations of petroleum hydrocarbons and lead were in excess of NJDEP Interim Standards for both samples. Table 1 provides a summary of significant analytical results by identification number. Figure 1 provides significant analytical results in relation to geographical sample location.

Tanker Barge Hookup Area

One (1) soil sample was collected from the Tanker Barge Hookup Area along the west edge of the facility adjacent to the Passaic River. The 0-6" increment was analyzed for petroleum hydrocarbons and lead. The 18-24" increment was analyzed for priority pollutant volatile organic compounds. Concentrations of petroleum hydrocarbons and lead were in excess of NJDEP Interim Standards. Volatile organic concentrations were not in excess of NJDEP Interim Standards. Table 1 provides a summary of significant analytical results by identification number. Figure 1 provides significant analytical results in relation to geographical sample location.

Stained Soil West of Gas Station Area

One (1) soil sample was collected from the stained soil west of the gas station adjacent to Harrison Street. The 0-6" increment was analyzed for petroleum hydrocarbons and lead. Concentrations of petroleum hydrocarbons and lead were in excess of NJDEP Interim Standards. Table 1 provides a summary of significant analytical results by identification number. Figure 1 provides significant analytical results in relation to geographical sample location.

Former Scrap Metal Storage Area

Three (3) soil samples were collected from the former scrap metal storage area of the facility. Samples D1-D2 had analysis performed for petroleum hydrocarbons and priority pollutant metals (including lead) for the 0-6" increment. Sample D3 had analysis performed for petroleum hydrocarbon and USEPA priority pollutants minus the volatile organic fraction on the 0-6" increment. Volatile organic compound analysis was performed on the 18-24" increment of this sample.

Sample D1 contained concentrations of lead, petroleum hydrocarbons, copper, zinc, chromium, and nickel in excess of NJDEP Interim Standards. Sample D2 contained concentrations of lead, petroleum hydrocarbons, copper, zinc chromium, nickel and arsenic in excess of NJDEP Interim Standards. Sample D3 contained concentrations of chromium and nickel in excess of NJDEP Interim Standards. In addition phenols were detected at 5.5 ppm from this sample. Table 1 provides a summary of significant analytical results by identification number. Figure 1 provides significant analytical results in relation to geographical sample location.

Lumber Yard Gas Pump Area

Three (3) soil samples were collected from the gas pump area at the lumber yard on the east side of the facility. Two (2) samples were collected from location E1, one at a 0-6" increment, the other at a 6" increment within visually observed clean soil beneath the first sample. Both samples were analyzed for petroleum hydrocarbons. Sample location E2, approximately ten (10) feet from E1, was collected and analyzed for petroleum hydrocarbons to determine the horizontal extent of visually contaminated soil at location E1.

Concentrations of petroleum hydrocarbons from samples E1 0-6" and E1 6" below the visually stained increment were in excess of NJDEP Interim Standards. Sample E2 petroleum hydrocarbon concentrations were not in excess of NJDEP Interim Standards. Table 1 provides a summary of significant analytical results by identification number. Figure 1 provides significant analytical results in relation to geographical sample locations.

Table 1
Summary of Significant Analytical Results

		Analytical Parameters (ppm)						
Sample Locations (Increment)		Lead	Petroleum Hydrocarbons	Copper	Zinc	Chromium	Nickel	Arsenic
DIKED TANK FROM	A1 (0-12")	500	73,000					
	A2 (0-12")	780	720					
	A3 (0-12")	350	13,000					
	A4 (0-12")	960	9,000					
	A5 (0-12")	320	52,000					
	A5 (18-24")	170		230				
FUEL OIL TANK (AGMT)	B1 (0-6")		17,000					
	B2 (0-6")		2,900					
BAY TRUCK LOADING RACK	C1-C3 (0-6") composite	540	45,000					
	C4-C6 (0-6") composite	540	17,000					
SCRAP METAL STORAGE	D1 (0-6")	910	17,000	640	1,200	200	330	
	D2 (0-6")	1,350	32,000	2,300	1,200	3,000	7,800	21*
	D3 (0-6")					670	350	
LUMBER YARD (AC RUMPHREY)	E1 (0-6")		47,000					
	E1 (6" below stain)		6,500					
PAPER MILL	F1 (0-6")	440	6,100					
WATER WIL	G1 (0-6")	820	680					

*in excess of NJDEP Interim Standards by 1 ppm or less.



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08818-7809 • Telephone (201) 225-2000

Company	<u>Tenneco Oil</u>	Job #:	<u>8428</u>
	<u>c/o Greenstone & Sokol</u>	Date:	<u>6/19/85</u>
Address	<u>226 West State Street</u>	Auth.:	<u> </u>
		Lot #:	<u>920</u>
City	<u>Trenton</u> State <u>NJ</u> Zip <u>08608</u>	Invoice #:	<u>--</u>
To Attn. of:	<u>Steven Picco</u>	Sample Date:	<u>5/20/85</u>
		N.J. Lab Certification	<u> </u>
		ID#	<u>12064</u>

REPORT OF ANALYSIS

<u>PAS #</u>	<u>Sample Identification</u>	<u>Petroleum Hydrocarbons</u> <u>(mg/kg - dry wt)</u>	<u>Lead</u> <u>(mg/kg - dry wt)</u>
A1171	Diked Area A ₁ , 0-12"	73,000	500
A1172	Diked Area A ₂ , 0-12"	720	780
A1173	Diked Area A ₃ , 0-12"	13,000	350
A1174	Diked Area A ₄ , 0-12"	9,000	960
A1175	Diked Area A ₅ , 0-12"	52,000	320



PRINCETON AQUA SCIENCE

185 Fieldcrest Avenue • CN 7808 • Edison, New Jersey 08818-7808 • Telephone (201) 225-2000

Company Tenneco Oil Job #: 8*28
c/o Greenstone & Sokol Date: 6/19/85
Address: 226 West State Street Auth: _____
City Trenton State NJ Zip 08608 Lot #: 7420
To Attn. of: Steven Picco Invoice #: --
Sample Date: 5/20/85
N.J. Lab Certification
ID# 12064

Purgeable Organic Compounds PAS #A1176, Diked Area A1, 18-24"
(by GC/MS) (ppm)

BENZENE	ND
BIS (CHLOROMETHYL) ETHER	ND
BROMOFORM	ND
CARBON TETRACHLORIDE	ND
CHLORO BENZENE	ND
CHLORODIBROMOMETHANE	ND
CHLOROETHANE	ND
2-CHLOROETHYL VINYL ETHER	ND
CHLOROFORM	0.14
DICHLORODIBROMOMETHANE	ND
DICHLORODIFLUOROMETHANE	ND
1,1-DICHLOROETHANE	ND
1,2-DICHLOROETHANE	ND
1,1-DICHLOROETHYLENE	ND
1,2-DICHLOROPROPANE	ND
1,2-DICHLOROPROPYLENE	ND
ETHYLENE	ND
METHYL BROMIDE	ND
METHYL CHLORIDE	ND
METHYLENE CHLORIDE	0.18
1,1,2,2-TETRACHLOROETHANE	ND
TETRACHLOROETHYLENE	0.08
TOLUENE	ND
TRANS 1,2-DICHLOROETHYLENE	ND
1,1,1-TRICHLOROETHANE	ND
1,1,2-TRICHLOROETHANE	0.22
TRICHLOROETHYLENE	ND
TRICHLOROFLUOROMETHANE	ND
VINYL CHLORIDE	ND

ND=NONDETECTABLE LESS THAN .05000

ADDITIONAL COMPOUNDS

ACROLEIN

ND 1000

ACETONE

ND 1000

Environmental Scientists & Engineers

932520444



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08817 • Telephone (201) 225-2000

Company	Tenneco Oil	Job #:	8428
	c/o Greenstone & Sokol	Date:	6/19/85
Address	226 West State Street	Path:	
		Lab #:	7420
City	Trenton	State	NJ
		Zip	08608
To Attn. of:	Steven Picco	Invoice #:	--
		Sample Date:	5/20/85
		N.J. Lab Certification	
		ID#	12064

REPORT OF ANALYSIS

PAS #A1180
Diked Area A₅, 18-24"
(mg/kg = dry wt)

Cyanide	<1
Phenols	0.72
Antimony	<2
Arsenic	4.9
Beryllium	0.28
Cadmium	1.1
Chromium	4.2
Copper	230
Lead	170
Mercury	0.56
Nickel	9.3
Selenium	<0.5
Silver	0.03
Thallium	<2
Zinc	89



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165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08816-7809 • Telephone (201) 225-2000

Company	Tenneco Oil	Job #:	8428
	c/o Greenstone & Sokol	Date:	6/19/85
Address	226 West State Street	Auth.:	
		Lot #:	7420
City	Trenton	Invoice #:	--
State	NJ	Sample Date:	5/20/85
Zip	08608	N.J. Lab Certification	
To Attn. of:	Steven Picco	ID#	12064

REPORT OF ANALYSIS

PAS #	Sample Identification	Petroleum Hydrocarbons (mg/kg-dry wt)	Lead (mg/kg - dry wt)
A1189	Loading Rack Composite Left Side (C ₁ -3)	45,000	540
A1190	Loading Rack Composite Right Side (C ₄ -6)	17,000	540
A1191	Barge Hook-up Area, 0-6" (F ₁)	6,100	440
A1193	Stain Adjacent to Gas Station Area, 0-6" (G1)	680	820
A1198	Stain by River, 0-12" (I ₁)	460	--
A1199	Door by Gas Pump E ₁ , 0-6"	47,000	--
A1200	Sample 10' from E ₁ , 0-6" (E ₂)	64	--
A1201	Location E ₁ , Visually Clean Soil	6,500	--



PRINCETON AQUA SCIENCE

185 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08818-7809 • Telephone (201) 225-2000

Company Tenneco Oil Job #: 8428
c/o Greenstone & Sokol Date: 6/19/85
Address 226 West State Street Auth.:
City Trenton State NJ Zip 08608 Lot #: 1420
Invoice #: --
Sample Date: 5/20/85
To Attn. of: Steven Picco N.J. Lab Certification
ID# 12064

REPORT OF ANALYSIS

PAS #A1194
Scrap Material Area D1, 0-6"
(mg/kg - dry wt)

Petroleum Hydrocarbons	17,000
Antimony	8
Arsenic	13
Beryllium	0.34
Cadmium	22
Chromium	200
Copper	640
Lead	910
Mercury	4.1
Nickel	330
Selenium	0.92
Silver	0.25
Thallium	1.6
Zinc	1,200



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08816-7809 • Telephone (201) 225-2000

Company	Tenneco Oil	Job #:	8428
	c/o Greenstone & Sokol	Date:	6/19/85
Address	226 West State Street	Auth.:	
		Lot #:	520
City	Trenton	State	NJ
		Zip	08608
To Attn. of:	Steven Picco	Invoice #:	--
		Sample Date:	5/20/85
		N.J. Lab Certification	
		ID#	12064

REPORT OF ANALYSIS

PAS #A1195
Scrap Metal Area D₂, 0-6"
(mg/kg - dry wt)

Petroleum Hydrocarbons	32,000
Antimony	2
Arsenic	21
Beryllium	0.34
Cadmium	39
Chromium	3,000
Copper	2,300
Lead	1,350
Mercury	0.34
Nickel	7,800
Selenium	2.1
Silver	49
Thallium	<2
Zinc	1,200



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08817 • Telephone (201) 225-2000

Company	Tenneco Oil	Job #:	8428
	c/o Greenstone & Sokol	Date:	6/19/85
Address	226 West State Street	Auth.:	
		Lot #:	7420
City	Trenton	Invoice #:	--
State	NJ	Sample Date:	5/20/85
Zip	08608	N.J. Lab Certification	
To Attn. of:	Steven Picco	ID#	12064

REPORT OF ANALYSIS

PAS #A1196
Scrap Metal Area, D₃, 0-6"
(mg/kg - dry wt)

Cyanide	<1
Phenols	0.27
Antimony	<2
Arsenic	6.6
Beryllium	0.24
Cadmium	1.4
Chromium	670
Copper	84
Lead	65
Mercury	<0.06
Nickel	350
Selenium	8.5
Silver	0.03
Thalium	<2
Zinc	54



PRINCETON AQUA SCIENCE

185 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08818-7809 • Telephone (201) 225-2000

Company	Tenreco Oil	Job #:	8428
	c/o Greenstone & Sokol	Date:	6/19/85
Address	226 West State Street	Auth.:	
		Lot #:	7420
City	Trenton	Invoice #:	--
State	NJ	Sample Date:	5/20/85
Zip	08608	N.J. Lab Certification	
To Attn. of:	Steven Picco	ID#	12064

Acid Extractable Compounds
(by GC/MS)

PAS #A1196
Scrap Metal Area, D₃, 0-6"
(mg/kg - dry wt)

4-CHLORO-3-METHYLPHENOL	ND
2-CHLOROPHENOL	ND
2,4-DICHLOROPHENOL	ND
2,4-DIMETHYLPHENOL	ND
2,4-DINITROPHENOL	ND
2-METHYL-4,6-DINITROPHENOL	ND
2-NITROPHENOL	ND
4-NITROPHENOL	ND
PENTACHLOROPHENOL	ND
PHENOL	5.5
2,4,6-TRICHLOROPHENOL	ND

ND-NONDETECTABLE LESS THAN 10ppm



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • CN 7808 • Edison, New Jersey 08818 • NJ • Telephone (201) 225-2000

Company	Tenneco Oil	Job #:	8428
	c/o Greenstone & Sokol	Date:	6/19/85
Address	226 West State Street	Auth.:	
		Lot #:	1420
City	Trenton	State	NJ
		Zip	08608
To Attn. of:	Steven Picco	Invoice #:	--
		Sample Date:	5/20/85
		N.J. Lab Certification	
		ID#	12064

REPORT OF ANALYSIS

PAS = A1202
Field Blank
(mg/l)

Petroleum Hydrocarbons	2
Cyanide	<0.02
Phenols	0.002
Antimony	<0.03
Arsenic	<0.01
Beryllium	<0.002
Cadmium	<0.001
Chromium	<0.01
Copper	0.004
Lead	<0.007
Mercury	<0.002
Nickel	<0.006
Selenium	<0.01
Silver	<0.008
Thallium	<0.03
Zinc	0.02

Whittaker Clark & Daniels

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NEWARK INDUSTRIAL DIRECTORY 1960

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NEWARK INDUSTRIAL DIRECTORY

1960

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NEWARK ASSOCIATION OF
COMMERCE AND INDUSTRY

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Western Electric Company, Inc. 100 Central Avenue, Kearny Mitchell 2-7700	Paul W. Smith Manager, Industrial and Labor Relations	Telephone and other communications equipment
Westinghouse Electric Corp. 95 Orange Street, Newark Humboldt 4-3000	J. M. Wallace Manager	Instruments, relays and watthour meters
Weston Instruments, Division of Daystrom, Incorporated 614 Frelinghuysen Ave., Newark Bigelow 3-4700	J. F. Degen Vice President of Operations	Electrical measuring instru- ments & tachometers; thermo- meters; recorders, controllers photographic exposure meters, photoelectric cells, relays, specialized test equipment
White Laboratories, Inc. Kenilworth Chestnut 5-5000	H. C. Lundquist Personnel Director	Gum products, vitamins, hormones, antibiotics, etc.
White, James L., & Son 374 Verona Avenue, Newark Humboldt 2-3727	Robert L. White Partner	Contract machine parts; Special machinery
White Motor Company, The 190 Murray Street, Newark Bigelow 2-4400	H. J. Muchmore Branch Manager	White, Autocar and Reo trucks - parts and service
Whittaker, Clark & Daniels, Inc., Jacobus Avenue, South Kearny - Market 2-5288 260 W. Broadway, N.Y.C. Market 4-1891	William O'Dowd Plant Manager John Seidler Sales Manager	Minerals, fillers, talc, puri- fied titanium, aluminum stearate, asbestos, barytes, bentonite, phthalocyanine blue, phthalocyanine green, "Seagull" Ultramarine Blue, colors, cosmetic colors, pigments, clays, chalk, etc.
Wigder Manufacturing Co. Inc. 26-30 Wickliffe Street, Newark Market 2-6545	M. B. Wigder Sales Manager	Nail files, tweezers, scissors and nail clippers
Williams, Paul B., Inc. 1010 Broad Street, Newark Mitchell 2-6464	Paul B. Williams Secretary-Treas.	Typewriter ribbons
Wilson-Imperial Company 115 Chestnut St., Newark Market 2-6050	Elmer R. Nippes Vice President & Genl. Mgr.	Paint & varnish removers; penetrating floor seal; fast drying floor finish; brush cleaner; paint roller cleaner; wallpaper remover; surface pre- parer before refinishing
Wilson Spring Co., Inc., The 229 Murray St., Newark Bigelow 2-4724	George C. Simon Superintendent	Precision springs and wire forms

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June 19, 1996

VIA FEDERAL EXPRESS

Ms. Amelia Wagner, Esq.
U.S. Environmental Protection Agency
290 Broadway, 19th Floor
Room W-20
New York, New York 10007-1866

Re: Sources of Hazardous Substances in the Passaic River Study Area:
Hilton-Davis

Dear Amelia:

Enclosed, as we have discussed, please find an opinion from ChemRisk that explains how the manufacturing processes used at the Hilton-Davis facility generated PCBs and dioxins. Maxus renews its request that the Agency notify Sterling Winthrop that it is a person liable for costs associated with the Passaic River.

As you may recall, Maxus previously forwarded to the Agency evidence of the link between Hilton-Davis' phthalocyanine blue manufacture and PCBs. *See* Memo to Lance Richman dated October 23, 1995. Building on this evidence, ChemRisk reviewed the process descriptions for this facility provided by Nathaniel Goodwin, Hilton-Davis' former process chemist, in response to the EPA's Request for Information, and in the attached opinion letter analyzed carefully how these processes generated PCBs. In the course of reviewing this site specific information, ChemRisk also became convinced that these processes also generate dioxins, and a literature search confirmed these conclusions.

As we have previously explained, the process wastes from this facility were discharged to the River. The 104(e) Response of Sterling Winthrop admitted that the facility's wastes were discharged to the River untreated for a period of time. *See* Sterling Winthrop Response to EPA's Request for Information under CERCLA Section 104(e) at

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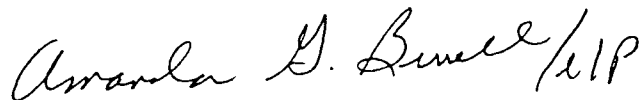
U.S. Environmental Protection Agency

June 19, 1996

Page 2

page 7. In addition, Nathaniel Goodwin offered to sell a schematic of the sewage system used by the facility to bypass the municipal collection systems and discharge wastes directly to the River. Robert Malone, another former employee, provided an affidavit describing this system in detail and its use repeatedly to discharge untreated process waste directly to the River. *See* Affidavit of Robert Malone, submitted to EPA on April 1, 1996. ChemRisk's opinion letter establishes that these wastes contained dioxins and PCBs, in addition to the copper salts and sulfuric acid that even Sterling Winthrop admitted were in the waste stream.

Very truly yours,

A handwritten signature in cursive script that reads "Amanda G. Birrell" followed by a stylized "u/P" or similar mark.

Amanda G. Birrell

0695:5459

Enclosures

cc: Mr. Lance Richman
Mr. Gerald Connolly

932520458



Stroudwater Crossing
1685 Congress Street
Portland, ME 04102
207.774.0012
FAX 207.774.8263

MEMORANDUM

To: Amanda Birrell (Vinson & Elkins)

cc: Rick McNutt (Maxus)

From: Steve Huntley

Date: June 18, 1996

Subject: ~~Formation and Release of PCBs and PCDD/Fs to the Passaic River during Dye Production at Hilton-Davis~~

At your request I have evaluated the information provided in Hilton-Davis' response to EPA's 104(e) request for information pertaining to their operations at the 120 Lister Avenue facility. In addition, I have reviewed a number of other documents including the 104(e) responses of Nathaniel Goodwin and Sterling Winthrop, Inc., and the affidavit of Robert Malone, a former Hilton-Davis employee. It is my opinion that, based on an evaluation of the chemical production processes used at this facility, Hilton-Davis generated both polychlorinated biphenyls (PCBs) and polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs) during the production of phthalocyanine dyes. Moreover, based on the documented waste treatment and disposal practices used by Hilton-Davis, I conclude that Hilton-Davis did discharge PCDD/F and PCBs to the Passaic River. This conclusion is confirmed by the presence of PCDD/Fs, PCBs, and other chemicals related to Hilton-Davis in sediments immediately adjacent to the Hilton-Davis facility. These contaminated sediments were deposited during the approximate period of time Hilton-Davis was known to have discharged process wastes to the Passaic River.

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PCB Contamination of Copper Phthalocyanine Blue

The mechanism of formation of PCBs has been widely discussed in the scientific literature. Commercially, PCBs are produced by chlorination of biphenyl in the presence of a catalyst, such as ferric chloride, at temperatures as low as 150°C, typically for 12 to 36 hours (EPA, 1976; de Voogt and Brinkman, 1989). PCBs are also inadvertently formed in as many as 10,000 different chemical processes (Chemical Manufacturers Association, 1983). The inadvertent formation of high concentrations of PCBs in a wide range of processes is explained by the minimal reaction conditions required for PCB formation (presence of organic carbon, a source of chlorine, a catalyst, and elevated temperatures (Aceto, 1988)). These minimal conditions are present during the production of phthalocyanine blue dyes. The process used by Hilton-Davis to produce phthalocyanine blue involves combining and heating phthalic anhydride (a dioxin precursor), urea, and cuprous chloride, followed by acidification with sulfuric acid, and then neutralization with ammonia (NJDEP, 1987).

Because of its aromaticity and ortho-substitution, phthalic anhydride provides an ideal source of organic carbon for the formation of biphenyl rings. Cuprous chloride dissociates in solution to form a number of different chlorine-based ions, including the reactive hypochlorite acidium ion (H_2OCl^+) which has been shown to undergo nucleophilic substitution on aromatic rings (Breslow, 1969). Copper ions, from the dissociation of cuprous chloride, act as catalysts in the reaction. The reaction temperature for producing phthalocyanine blue is typically in the range of 190 to 200°C (Fieser and Fieser, 1963), significantly higher than that used in the commercial production of PCBs. Generally, an increased rate of reaction results from an increase in temperature. While the higher temperature used in phthalocyanine blue production should have the effect of increasing the rate at which PCBs are generated, this effect is countered to some extent by the less reactive form of chlorine likely to be present in the phthalocyanine blue process (H_2OCl^+) as compared to the more reactive elemental chlorine gas (Cl_2) used in commercial PCBs production. Nevertheless, all factors necessary for PCB formation are present during phthalocyanine dye production, and their formation is confirmed by PCB concentrations as high as 80 ppm in copper phthalocyanine blue (EPA, 1986). In their 104(e) response, Hilton-Davis admits that copper phthalocyanine blue was produced at the 120 Lister Avenue facility. It is my opinion, that the copper phthalocyanine blue process utilized by Hilton-Davis is consistent with the process evaluated by EPA, and that PCBs would have been present in the phthalocyanine blue product as well as the waste streams associated with its production.

Formation of PCDD/Fs during the Production of Phthalocyanine Green

In addition to the production of copper phthalocyanine blue, Hilton-Davis also admits in their 104(e) response to producing phthalocyanine green, the chlorinated form of copper phthalocyanine. A review of the process used by Hilton-Davis to produce copper phthalocyanine green indicates an extremely strong potential for PCDD/Fs to be generated, possibly at very high concentrations. Copper phthalocyanine green is produced by chlorination of copper phthalocyanine blue. The process of chlorinating copper phthalocyanine blue, described in Thomasset Colors' Standard

Operating Procedure dated March 24, 1975, as provided in Nathaniel Goodwin's 104(e) response, is summarized as follows:

1. Charge the reactor vessel with anhydrous aluminum chloride, talc, cupric chloride, and heat to 380 - 400°C (reaction time uncertain);
2. Allow the reactor vessel contents to cool to 300 - 320°C, add phthalocyanine blue and caustic soda to the reactor vessel, and mix for one hour;
3. After one hour of mixing, add iodine and sodium sulfide, and begin injection of chlorine gas at a rate of 75 - 100 lbs per hour while maintaining a temperature of 350 to 356°C for 10 hours¹.

The process of producing phthalocyanine green includes all the factors necessary for generating dioxins at high concentrations: use of a dioxin precursor as the reactant (phthalic anhydride), presence of metal catalysts (copper and aluminum), elevated temperatures (>350°C), alkaline conditions (through the addition of caustic soda), and introduction of a reactive form of chlorine (chlorine gas). Because these conditions are optimal for the formation of PCDD/Fs, the production of phthalocyanine green would have resulted in the generation of large amounts of PCDD/Fs, including 2,3,7,8-TCDD. This fact is supported by the presence of PCDD/Fs at part per billion concentrations in phthalocyanine dyes as has been reported in the scientific literature (Heindl and Hutzinger, 1989). Based on data reported in the published literature as well as by Hilton-Davis and a former Hilton-Davis employee regarding Hilton-Davis' phthalocyanine dye production and waste disposal practices, I conclude that phthalocyanine green would have contained measureable amounts of PCDD/Fs.

PCBs and PCDD/Fs in Hilton-Davis Waste Streams and Discharge to the Passaic River

The process used by Hilton-Davis to treat process waste streams associated with the production of phthalocyanine dyes would not be effective in the removal of hazardous substances, including PCBs and PCDD/Fs. Wastewater treatment consisted only of neutralization (i.e., pH adjustment) which would not remove all chemical contaminants from the waste stream. As described by NJDEP (1987) for Hilton-Davis' phthalocyanine blue process, there were two principal waste streams: wastewater from the cleaning of the three phthalocyanine blue reactor vessels and wastewater from the filter press. Both waste streams contained product as well as by-products generated during phthalocyanine dye synthesis. This fact is supported by Sterling Winthrop's 104(e) response which states that both phthalocyanine green and blue decant water and filtrates "contained trace amounts of copper salts." Both waste streams were either discharged directly to the Passaic River (see

¹The reaction time is described in the Affidavit of Robert Malone, a former Hilton-Davis employee, dated March 27, 1996.

Sterling Winthrop Response to 104(e)) or to the neutralization tank on-site, where it was then pumped to the combined sanitary sewer system (NJDEP, 1987). It is my opinion, therefore, that because of the chemical composition of their waste stream and documented discharges directly to the River, Hilton-Davis did discharge PCBs and PCDD/Fs to the Passaic River.

Temporal Correlation Between Passaic River Sediment Contaminants Related to Hilton-Davis

To evaluate the possibility that production and waste disposal practices at Hilton-Davis have impacted Passaic River sediments, the various processes and chemical inventories of Hilton-Davis were reviewed, and several chemicals were identified that were (1) used or expected to have been generated in Hilton-Davis chemical processes, and (2) found at elevated concentrations in sediments adjacent to Hilton-Davis. The sediment core nearest to the Hilton-Davis facility (Core 286B), collected during the 1995 Remedial Investigation of the Passaic River Study Area, was selected for assessing historical sediment contamination. Based on my evaluation of chemicals used or produced by Hilton-Davis, three chemicals were selected for evaluating the temporal relationship between Hilton-Davis discharge history and Passaic River sediment contamination:

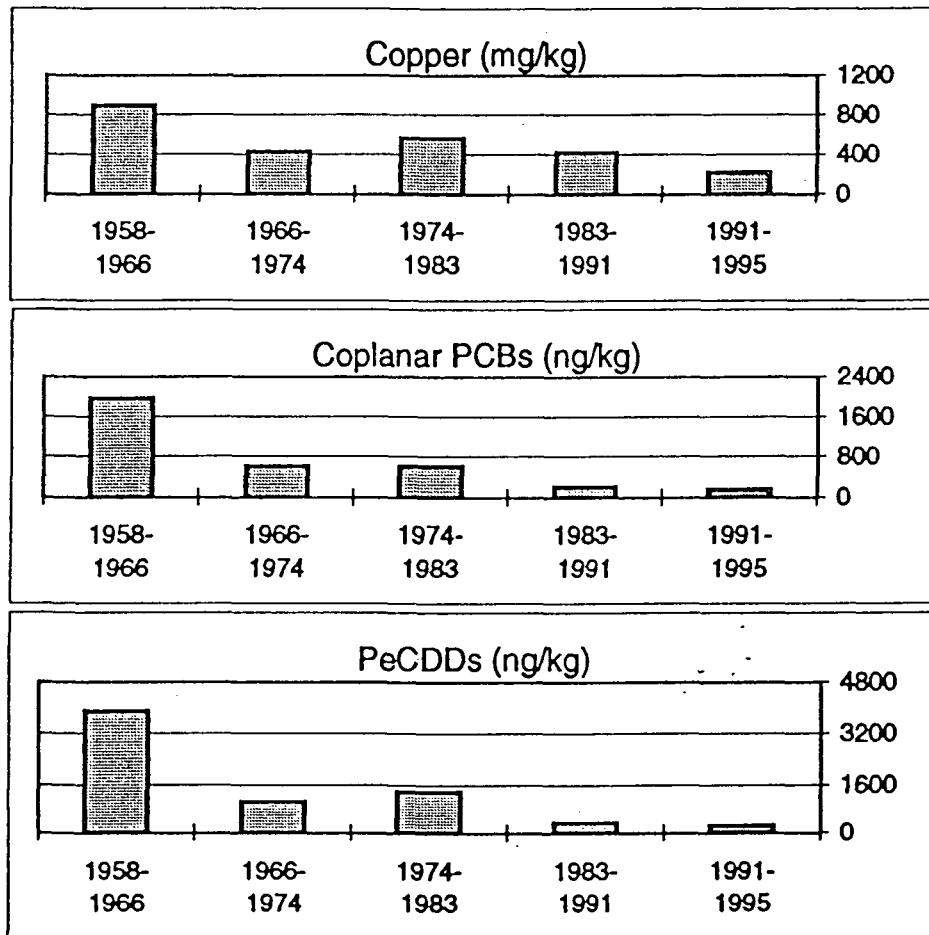
- Copper
- Pentachlorodibenzo-p-dioxins (PeCDDs)
- Total Coplanar PCBs

Copper was selected because it is a primary constituent of phthalocyanine blue and phthalocyanine green. PeCDDs were selected because the concentrations of these dioxin congeners were the highest in samples of phthalocyanine dyes analyzed by Heindl and Hutzinger (1989). Total coplanar PCBs were evaluated because it is not known which PCB congeners predominate in phthalocyanine blue. Copper, coplanar PCBs, and PeCDDs have all been detected at elevated concentrations in sediments adjacent to the Hilton-Davis facility.

The graph presented below illustrates the temporal relationship between copper, PeCDDs, and PCBs in Passaic River sediments adjacent to Hilton-Davis throughout the period of time Sterling Drug, Inc. owned and operated the facility (1957-1993; see Sterling Winthrop 104(e) response). It appears that phthalocyanine blue was produced throughout this period of time, and that phthalocyanine green was produced throughout Thomasett Colors' operation of the facility and up until 1981 (see Sterling Winthrop 104(e) response). All three chemicals show a similar trend over time. Interestingly, however, the levels of PCDD/Fs and PCBs drop off much faster in the 1983-1991 time-frame than do the levels of copper. This observation may be the result of the discontinuance of phthalocyanine green in 1981, which is expected to be a more significant source of PCDD/Fs and PCBs than the phthalocyanine blue because of the chlorination process used to produce phthalocyanine green. The levels of copper do not drop as dramatically because at all times the production of phthalocyanine blue was substantially greater than that of phthalocyanine green. The very consistent trends observed

from 1958-1983, for all three chemicals, may be explained by the concurrent production or use of these chemicals and their discharge into the Passaic River.

Sampling Station 286B Adjacent to Hilton-Davis Facility



In conclusion, there is strong justification to believe that Hilton-Davis' phthalocyanine dye production and waste disposal practices have adversely impacted Passaic River sediments. First, Hilton-Davis produced both copper phthalocyanine blue and copper phthalocyanine green (see NJDEP (1987), Sterling Winthrop's 104(e) response, and Nathaniel Goodwin's 104(e) response). Both PCBs and PCDD/Fs are known to be generated during the production of phthalocyanine dyes (EPA, 1986; Heindl and Hutzinger, 1989), and an evaluation of the specific processes used by Hilton-Davis indicate that phthalocyanine dyes produced by Hilton-Davis, and their associated waste streams, would have been contaminated with copper, PCBs, and PCDD/Fs. Second, the

neutralization of wastes streams from Hilton-Davis' phthalocyanine dye production processes would not have removed significant amounts of chemical contaminants, such as copper, PCDD/Fs, and PCBs, prior to discharge (see Sterling Winthrop 104(e) response). Third, it has been documented that these waste streams were discharged to the combined sewer system (NJDEP, 1987) and directly into the Passaic River (see Affidavit of Robert Malone and Sterling Winthrop 104(e) response). Fourth, copper, a primary constituent of Hilton-Davis' phthalocyanine dye production is found at elevated concentrations in Passaic River sediments adjacent to the Hilton-Davis facility together with proportionately elevated concentrations of PeCDDs and coplanar PCBs, expected to be generated during phthalocyanine dye production (see chemical data for Core 286B). Finally, a temporal evaluation of the concentrations of these three chemicals in Passaic River sediments adjacent to the Hilton-Davis facility and comparison of these temporal trends to the discharge history of the facility illustrate the relationship between Passaic River sediment contamination and the discharge history of Hilton-Davis. It is my opinion, therefore, that Hilton-Davis did discharge PCBs and PCDD/Fs to the Passaic River, and that the presence of PCBs and PCDD/Fs in Passaic River sediments is a direct result of Hilton-Davis' dye production and waste disposal practices.

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